# ISLAMIAH COLLEGE(AUTONOMOUS)

Accredited by NAAC with "A" Grade in 3rd Cycle

[Affiliated to Thiruvalluvar University, Vellore] VANIYAMBADI – 635 752

(AIDED& SELF FINANCE)

# **REGULATIONS& SCHEMES**



# **VOLUME XVI**

# 17th ACADEMIC COUNCIL MEETING

(For the UG & PG Candidates Admitted from 2022-2023)

23<sup>rd</sup> JANUARY 2023

# ISLAMIAH COLLEGE (AUTONOMOUS) BRIEF HISTORY

Islamiah College is a symbol of devotion to education and love for learning of the Muslims of Vaniyambadi, who in their zeal for translating into action the message of Sir Syed Ahmed Khan, established the Vaniyambadi Muslim Educational Society in 1901. The Society was registered in 1905 and soon under its auspices, the Islamiah Elementary School was started. The phenomenal growth of the school was due to the untiring and dedicated services and leadership of Janab T. Hajee Badruddin Sahib, Janab Malang Hayath Basha Sahib, Janab T. Ameeenuddin Sahib and Janab Malang Ahmed Basha Sahib. The full-fledged Islamiah High School came into being in 1912.

In 1915, the society resolved to establish the Islamiah College, and the foundation stone of the College was laid by His Excellency Lord Pentland, the then Governor of Madras Province. With princely donations from Muslim Philanthropists, the College was started in 1919 and got recognition in July 1921. The building in which the College is housed at present was opened by Nawab C. Abdul Hakeem Sahib.

In 1946, the College was upgraded, offering instruction in the two-year degree courses in B.A. Economics and B.Com. In 1954, B.A. Mathematics was started. In 1956, the college got affiliation with the pre-University and the three-year degree courses, B.A., B.Sc., and B.Com. Courses were started in 1957.

THE COLLEGE GOT AFFILIATION FROM THE UNIVERSITY FOR VARIOUS ADDITIONAL COURSES:

S. No.	Name of the Course	Major Subject	Year of Affiliation
1	B.Sc.	Chemistry	1963
2	B.A.	History	1967
3	B.Sc.	Zoology	1967
4	M.A.	History	1974
5	M.Com.	Commerce	1975
6	M.Sc.	Mathematics	1976
7	B.Sc.	Physics	1981
8	B.A.	Corporate Secretaryship	1982

9	B.A.	Industrial Organisation	1983
10	B.Sc.	Biochemistry	1985
11	M.Phil.	Commerce	1986
12	M.Sc.	Chemistry	1986
13	B.Sc.	Computer Science	1988

To cater to the needs of the community in changing circumstances B.A. (Industrial Organisation) was converted to B.B.A. in 2005 and B.Sc. (Zoology) was converted to B.Sc. (Biotechnology) in 2006.

# THE COLLEGE GOT AFFILIATION FOR THE FOLLOWING UNAIDED COURSES:

S.NO.	COURSE	MAJOR SUBJECT	YEAR OF AFFILIATION
1	Ph.D.	Commerce	1986
2	M.Phil.	Mathematics	1988
3	M.Phil.	History	1993
4	Ph.D.	History	1996
5	M.Sc.	Biochemistry	1998
6	M.Sc.	Physics	1999
7	M.Sc.	Computer Science	1999
8	M.Phil.	Chemistry	2000
9	B.C.A.	Computer Application	2000
10	Ph.D.	Chemistry	2005
11	Ph.D.	Mathematics	2005
12	M.Phil.	Biochemistry	2009
13	M.Phil.	Physics	2009
14	B.A.	English Lit.	2010
15	B.Sc.	Software Computer Science	2010
16	M.A.	English Lit.	2010
17	M.Sc.	Biotechnology	2010
18	Ph.D.	Physics	2010
19	B.Sc.	Computer Science	2013
20	M.Phil.	Computer Science	2013
21	M.Phil.	Biotechnology	2013
22	Ph.D.	Biotechnology	2014
23	Ph.D.	Biochemistry	2016
24	B.Com.	Commerce	2016
25	B.Sc.	Data Science	2022

In view of the changing scenario, two courses, namely B.A. (Economics) and B.A. (Corporate Secretaryship) were converted to B.Com (Finance & Accounts) and B.Com (Computer Applications) respectively, with effect from the academic year (2010-2011) to make the students of these two courses more employable.

The College, which had a humble beginning in 1919, has now grown into a full-fledged P.G. and Research Institution catering to the needs of the rural lot who would have otherwise not dreamt of taking a Research Degree.

Consequent to the establishment of Thiruvalluvar University, this College has been affiliated with Thiruvalluvar University from the academic year 2003-2004. In pursuance of academic excellence and to implement the suggestion of the NAAC peer team, the College applied for Autonomy in the year 2008. The expert team inspected the College in March 2010 and it recommended Autonomy. The College has thus conferred Autonomy with effect from the academic year 2010-2011 and we have completed the first phase of autonomy during the academic year 2015-2016. The College has been accredited by National Assessment and Accreditation Council (NAAC), Bangalore, with an "A" Grade in the 3<sup>rd</sup> Cycle from February 2021. By the grace of Almighty, the UGC has granted an extension of Autonomy to the College for a period of six years from 2016-17 to 2021-22.

The College has entered into a new era of partnership in education with Aligarh Muslim University (AMU), Indira Gandhi National Open University (IGNOU), and Maulana Azad National Urdu University (MANUU) the internationally reputed centres for higher education, from the academic year 2013-14, 2008-2009 and 1999-2000, respectively to widen the scope of learning to the employed / unemployed to get a degree and regular students to pursue additional courses.

The College aims to foster in the teachers, students and, through them in society, the attitudes and values needed for developing a "good life" in individuals and society. The College has earned Vaniyambadi a place on the educational map of India. The College keeps its portals open to members of all castes and communities.

# REGULATIONS BACHELOR DEGREE COURSES (CBCS PATTERN)

(For the candidates admitted from the Acedemic Year 2022-2023)

#### **CBCS**

Choice-Based Credit System (CBCS) is flexible for learning. Credit defines the quantum of contents/syllabi prescribed for a course and determines the number of hours of instruction required. The distinguishing features of CBCS are the following:

It permits the students to:

- Choose Electives from a wide range of Elective Courses offered by various departments of the College.
- Undergo additional courses and acquire more than the required number of credits.
- Adopt an interdisciplinary approach to learning.
- Make the best use of the expertise of available faculty

#### 1. ELIGIBILITY FOR ADMISSION

Candidates for admission to the first year of the Bachelor's Degree in Arts / Science / Commerce / Business Administration courses shall be required to have passed the Higher Secondary Examinations (Academic or Vocational Stream) conducted by the Government of Tamil Nadu or an Examination accepted as equivalent thereto by the Governing Body of Islamiah College (Autonomous), Vaniyambadi.

Provided that candidates for admission into the specific main subject of study shall also possess such other qualifying conditions as may be prescribed by the University / College in the regulations governing respective courses of study.

Admission to the direct second year of the UG degree program under the LATERAL ENTRY system is permitted, provided there is a vacancy and it is subjected to the Eligibility and specific permission of Thiruvalluvar University. Lateral Entry admission is for those candidates who have completed their three-year diploma course in the subject in which he seeks admission.

#### 2. CANCELLATION OF ADMISSION

The admission is at the candidate's risk and is provisional, subject to the approval of Thiruvalluvar University. If the admission is not approved for any reason, the candidate

shall not hold the College responsible for it. If selected, in the event of leaving the College after admission but at any time before completing the course, the fee for the residual period of the course should be paid by the candidate as per the rules in force.

#### 3. ELIGIBILITY FOR THE AWARD OF A DEGREE

A Candidate shall be eligible for the award of the Degree only if he has undergone the prescribed course of study in this College for three academic years and passed the examinations of all the Six Semesters prescribed, earning 180 credits and fulfilling such conditions as have been prescribed, therefore.

#### 4. DURATION

- **a)** Each academic year shall be divided into two semesters. The first academic year shall comprise of the first and second semesters, the second academic year: the third and fourth semesters and the third academic year: the fifth and sixth semesters, respectively.
- **b)** The Odd semesters shall consist of the period from June to November of each year and the even semesters from December to April of each year. There shall be at least 90 working days comprising 450 instructional hours for each semester.

#### 5. COURSE OF STUDY

The main subject of study for Bachelor's Degree courses shall consist of the following:

- PART- I CORE COURSES including interdisciplinary
- PART- II ELECTIVE COURSES including Language and English
- PART- III ABILITY ENHANCEMENT COURSES -

**Environmental Studies, Value Education, Skill Enhancement Courses And Value based Courses.** 

#### 6. EXTENSION ACTIVITIES

All the students shall have to enrol for NCC / NSS / Sports and Games / Rotaract / Youth Red Cross or any other service organization and subject associations in the college and shall have to put in a compulsory minimum attendance of 40 hours which shall be duly certified by the Principal of the college before 31<sup>st</sup> March in a year. If a student lacks 40 hours of attendance in the first year, he has to compensate for the same during the subsequent years. Literacy and Population Education field work shall be compulsory components in the above extension service activities.

The total marks for Extension Activities are 100, it is divided into 75 for External Activities (outside the college campus) and 25 for Internal Activities (inside the college campus) and the passing minimum is 40%. It is not taken into account for calculating the overall CGPA.

### 7. CONTINUOUS INTERNAL ASSESSMENT (CIA) TEST

The following procedure will be followed for the award of internal marks:

CIA Test I: Two or Three hours duration for 100 marks

CIA Test II: Three hours duration for 100 marks

Marks Distribution	Theory & Practical
CIA Test Marks 200 to be converted to	10 Marks
Library Usage in Hours - 20 hours per Semester for all the courses of UG Programmes	5 Marks
Assignment / Seminar / Observation	5 Marks
Attendance	5 Marks
TOTAL	25 Marks

Reg. No	Name	Test I - 100	Test II - 100	Total - 200	Marks converted to 10	Library Usage Min. 20 hours – 5	Assignment / Seminar 5	Attendance - 5	Total for 25 (Rounded Off)

In the last column, any fraction may be rounded off to the nearest integer.

The marks for the Attendance component in the Continuous Internal Assessment should be calculated as follows:

Attendance Earned	Category	Marks to be Awarded
90 % and Above	Highly Regular	5
75% but below 90%	Regular	4
65% but below 75%	Shortage	3
55% but below 65%	Detained	2
Below 55 %	Redo	0

The following procedure will be followed for the award of internal marks component of Library Usage:

### Library Usage for all UG Programmes - 20 hours per Semester

Library usage for UG in hours	Marks to be awarded
14 hrs and above	5
7 hrs to < 14 hrs	4
1 hr to < 7 hrs	3

#### 8. REQUIREMENTS FOR PROCEEDING TO SUBSEQUENT SEMESTER

- Candidates shall register their names for the First-Semester Examination after admission to the UG courses.
- Candidates shall be permitted to proceed from the First Semester up to the Final Semester irrespective of the number of arrears in any of the End Semester Examinations.
- Candidates shall be eligible to go to subsequent semesters as per the attendance rules prescribed by the Governing Body from time to time.

#### 9. REQUIREMENTS TO TAKE THE END-SEMESTER EXAMINATIONS

- a) A candidate will be permitted to take the End Semester Examinations of any Semester if
  - he secures atleast 75% of attendance out of the 90 instructional days / 450 instructional hours during the particular Semester.
  - he earns a progress certificate from the Principal for having satisfactorily completed the prescribed course of study in the subjects as required by these regulations, and
  - his conduct has been satisfactory.
- b) A candidate who has secured attendance of less than 75% but 65% and above shall be permitted to take the End Semester Examinations on the recommendation of the Head of the Department and approved by the Principal to condone the lack of attendance as well as on the payment of the prescribed condonation fee to the College.

A candidate will be permitted to appear for Practical examinations only if they have attended 75% of the practical classes. A candidate who has secured an attendance of less than 65% but 55% and above is detained for that particular semester. He/She will be permitted to write the examinations in the next Odd / Even Semester by paying the prescribed condonation fee.

The candidates who have an attendance of less than 55% are detained and they shall **REDO** the semester after completion of the program and after getting re-admission that too at the sole discretion of the Principal. However, readmission will be allowed only once during the duration of the program. Those who asked to redo the course can continue their studies without a break, but that particular semester after completing the program by attending the special classes arranged by HOD concerned.

The **REDO** students who have already completed their **CIA Test** and **Practical Examination** with at least minimum qualifying marks may be exempted from reappearing for the CIA Test and Practical Examination again in the readmitted Semester. However, if any student wishes to improve upon his marks, he can appear for the CIA Test and Practical Examinations. In such a case, the original marks or the marks secured in the readmitted semester, whichever is higher, shall be taken as final marks.

#### 10. PASSING MINIMUM

A candidate shall be declared to have passed the whole examination if he passes all the papers and practicals, wherever prescribed / as per the scheme of examinations, by earning **180 CREDITS**. He shall also fulfil the extension activities prescribed to qualify for the Degree.

#### In fixing the passing minimum, the following will be observed:

- a. There shall be no passing minimum for Internal Assessment.
- b. For End Semester Examinations, the passing minimum shall be P (minimum 40 % marks prescribed for the paper for each course / practical / project and Viva-voce).
- c. In aggregate (End Semester Examination + Internal Assessment) the passing minimum shall be P for each course.

#### 11. GRADING SYSTEM

The marks earned by a candidate in the Internal Assessment and End Semester Examinations for each of the courses will be added. The marks thus obtained will then be converted into Letter Grades and Grade points as per the details given below:

Range of Marks	Letter Grade	Grade Points
96 – 100	0	10
86 – 95	A+	0
76 – 85	Α	8
66 – 75	B+	7
56 – 65	В	6
50 – 55	С	5
40 – 49	Р	4
00 – 39	F	0
Absent	Ab	0

The term Grading system indicates a seven-point scale of evaluation of the performances of students in terms of Grade Points secured in the Internal and External Examinations.

#### 12. CLASSIFICATION OF SUCCESSFUL CANDIDATES

Successful candidates who passed all the specified courses in a program are classified as follows:

Passed all the courses with a CGPA of 7.5 and

above without any arrear : First Class with Distinction

Passed all the courses with a CGPA of 6 to 7.4 : First Class

Passed all the courses with a CGPA of 5 to 5.9 : Second Class

Passed all the courses with a CGPA of 4 to 4.9 : Third Class

The total performance within a semester and continuous performance starting from the first semester are indicated respectively by **Grade point Average (GPA)** and **Cumulative Grade point Average (CGPA)**. These two are calculated by the following formula.

$$GPA = \frac{\sum_i C_i G_i}{\sum_i C_i} = \frac{Sum \ of \ the \ product \ of \ credits \ and \ grade \ points \ earned}{Sum \ of \ the \ credits \ of \ the \ courses \ in \ a \ Semester}$$

$$CGPA = \frac{\sum_{n} \sum_{i} C_{ni} \ G_{ni}}{\sum_{n} \sum_{i} C_{ni}}$$

$$CGPA = \frac{Sum \ of \ the \ product \ of \ the \ credits \ and \ grade \ points \ earned}{Sum \ of \ the \ credits \ for \ the \ entire \ programme}$$

Where  $C_i$  is the credit earned for the course i in any semester,  $G_i$  is the grade point obtained by the student for the course i and n is the number of courses passed in that semester. CGPA is the GPA of all the courses starting from the first semester to the current semester.

#### 13. RANKING

Candidates who pass all the examinations prescribed for the program in the first appearance alone are eligible for Ranking, provided in the case of candidates who pass all the examinations prescribed for the program with a break in the first appearance due to shortage of attendance, but his conduct has been satisfactory are also eligible for classification. The marks obtained in improvement examinations will not be taken into consideration for Ranking.

#### 14. THE MEDIUM OF INSTRUCTION AND EXAMINATIONS

The medium of instruction and question paper shall be in English. Candidates having arrears in odd/even semesters can appear for such papers in the odd/even semester examination without any restrictions.

#### 15. SUBMISSION OF RECORD NOTEBOOKS FOR PRACTICAL EXAMINATIONS

Candidates taking the practical examinations should submit Bonafide Record Note Books prescribed for the practical examinations. Otherwise, the candidates will not be permitted to take the practical examinations. However, in genuine cases, where students could not submit the record notebooks may be permitted to take the practical examinations provided the Head of the Department and the course teacher concerned certify that the candidate has performed the experiments prescribed for the course. For such candidates who do not submit record books, zero marks will be awarded for record notebooks in the practical examination concerned.

In case a candidate does not secure the prescribed passing minimum in the practical examination, the marks awarded for the Record Notebook at the time of the first appearance for the practical examination should be made available by the Controller of Examinations to the Examiners through the Head of the Department concerned, at the subsequent appearance by the candidate.

#### 16. IMPROVEMENT OF MARKS IN THE COURSES ALREADY PASSED

Candidates, desirous of improving the marks secured in a passed course on their first attempt, shall reappear once within a period of two subsequent semesters. The improved marks shall be considered for Classification / Distinction, but not for ranking. If there is no improvement, there shall not be any change in the original marks already awarded. The fee for such appearances will be as decided by the Governing Body from time to time. Candidates will not be allowed to improve marks in the Practical, Project, Viva-voce and fieldwork.

### **17. MOOC**

All the UG, PG and M.Phil candidates admitted from the academic year 2022-2023 shall have to complete one MOOC of a minimum of 4 weeks duration mandatory and the certificate of completion of MOOC is to be submitted.

#### 18. SELF-SUPPORTIVE COURSES

The above Regulations shall be applicable to candidates undergoing the respective selfsupportive courses also.

#### 19. Rank Holders

The student who secures the highest marks in aggregate of all the subjects in the first attempt of the autonomous examinations will be the Rank Holder. This applies to all UG/PG/M.Phil. Programs of our College. The Rank Holder will be awarded a certificate and prize.

#### **20. TRANSITORY PROVISION**

Candidates who have joined the program from the academic year 2022-23 will be permitted to appear for the examinations under this Regulation for a maximum period of **SIX y**ears. Thereafter, they will be permitted to appear for the examinations only under the new Regulations in force. The equivalent paper to be written will be decided by the Chairman of the respective Board of Studies. Such candidates have to reregister for the course. The fee for such re-registration will be as decided by the Governing Body from time to time.

#### 21. APPRENTICESHIP / INTERNSHIP / PROJECT REPORT

#### **OBJECTIVES:**

- 1. To improve the employability of students pursuing Undergraduate level general degree Programme.
- 2. To focus on outcome-based learning in degree Programmes.
- 3. To promote active linkage between the higher education system and industry, non-commercial and commercial enterprises/organizations.

#### **GENERAL PROVISIONS:**

- Any UG degree program in all disciplines as specified by the UGC under section 22

   (3) of the UGC Act, 1956 is eligible to embed apprenticeship/ internship to the degree program.
- 2. An apprenticeship/internship-embedded degree program shall be treated at par with the UG degree Programmes specified by the UGC under section 22 (3) of the UGC Act, 1956.

#### **DURATION:**

- 1. Any UG degree program will have the option to embed at least one semester of apprenticeship/internship as part of the degree program without altering the total duration of the program.
- 2. The period of apprenticeship/internship training shall be 90 hours duration apart from the regular teaching hours.
- 3. The HEIs shall have the flexibility to schedule apprenticeship/ internship within the course duration and hence the student may commence his apprenticeship/internship training from the IV Semester holidays onwards.
- The spells of apprenticeship/internship shall be scheduled either continuously or at intervals depending upon the requirement and practicality of the discipline concerned.

#### **EVALUATION OF THE PROJECT WORK**

Regarding the evaluation of the project work, the total mark is 100. It is divided into 75 marks for project evaluation and 25 marks for the viva-voce examination. The marks for project work evaluation and viva-voce are to be awarded jointly by the internal examiner and the external examiner.

The external examiner is to be drawn from other related faculty from within the college / affiliating University Departments / any affiliated college within our University jurisdiction.

#### **CREDIT MECHANISM:**

- 1. Credits for the apprenticeship/internship program shall be included in the total credits of the entire program.
- 2. At least 20% of the total Credits for the degree program should be assigned to apprenticeship/internship.

Program	Duration	Credit	Tota	l Marks
Apprenticeship/Internship and	90 hours		Viva	Project
Project Report	(Beyond Regular Teaching hours)	30	25	75

#### **SUBMISSION OF PROJECT REPORTS**

The projects for the UG degree program may be independent or a group. In the case of group projects, a maximum of **FIVE** students are in a group. The format for the title page, certificate by the project advisor, declaration by the candidate(s) and the certificate for internship training taken outside the college campus is available in the office of the Controller of Examinations. The project reports duly countersigned by the Head of the Department concerned and the Principal should be submitted to the office of the Controller of Examination within the specified date.

# QUESTION PAPER PATTERN FOR UG DEGREE PROGRAMMES - 3 HOURS DURATION

Part A	To answer All the 15MCQs (Three questions from each UNIT)	15 x 1 = 15 Marks					
Part B	To answer All the 5 questions (One question from each UNIT)	5 x 3 = 15 Marks					
Part C	To answer All the 5 questions (either or type) (One question from each UNIT)	5 x 5 = 25 Marks					
Part D	To answer 3 questions (out of 5 questions) (One question from each UNIT)	3 x15 =45 Marks					
	TOTAL 100 Marks*						
	* To be converted to 75 Marks						
	(Equal Weightage should be given to ea	ach unit)					

# ISLAMIAH COLLEGE (AUTONOMOUS) COURSE STRUCTURE FOR UG PROGRAMMES (CBCS PATTERN)

(For the Candidates admitted from the academic year 2022 - 2023)

### PROGRAMME OUTCOMES (POs) FOR B.A. ENGLISH

#### By the end of the program, the students will be able to

- **PO1** Communicate in English, ideas, thoughts & knowledge effectively in conversations, and meetings & especially in a Digital environment. Develop linguistic skills in one Indian/Regional language
- **PO2** Demonstrate domain-specific knowledge and its applications in real-life situations
- **PO3** Synthesize learned knowledge and skills to effectively and efficiently perform the job duties of a profession
- PO4 Critically evaluate a situation and suggest a solution after careful consideration of the alternatives
- **PO5** Exhibit potential to accomplish tasks independently or as a member or leader of a team
- PO6 Plan and Execute a Project after careful evaluation of the activities involved
- PO7 Develop products, Design Policies, and/or collaborate to help Society in building a Sustainable Environment
- PO8 Discover a passion for Lifelong Learning through MOOCs, ODL, and Self Learning techniques through the optimum use of ICT
- PO9 Demonstrate ability towards critical thinking about his role as a responsible citizen
- **PO10** Identify and assess various issues in Environment and suggest measures to overcome them. Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future

# COURSE STRUCTURE FOR B.A. ENGLISH (For the candidates admitted from the academic year 2022-2023)

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
			UBFUR101	Urdu I						
	GE1	Generic Elective (To choose 1	UBFAR101	Arabic I	6	5	3	25	75	100
	OL.	out of 4)	UBFHD101	Hindi I			0	20	''	100
			UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education*	2	1	3	25	75	100
'	DSC1	Discipline-Specific Core Course	UBEN1001	Indian Literature in English	7	6	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB101	Professional Communication for Arts and Social Sciences**	3	3	3	25	75	100
	OEC1	Other Elective Course	UBENAL11	Allied - Literary Forms	7	5	3	25	75	100
	VBC1	Course (10	UBVBC101	1. Moral Education <sup>#</sup>	1	1	1	_	25	25
		choose 1 out of 2)[Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	•					
				TOTAL	30	25	-	150	475	625
			UBFUR201	Urdu II		5	3	25	75	100
		Generic Elective (To choose 1	UBFAR201	Arabic II	6					
	GE3	out of 4)	UBFHD201	Hindi II						
		,	UBFTA201	Tamil II						
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	7.5	100
		A I. 1114						20	75	
	AEC2	Ability Enhancement Course	UBENV201	Environmental Studies*	2	1	3	25	75	100
II	AEC2 DSC2	Enhancement Course Discipline-Specific Core Course	UBENV201 UBEN2001	Environmental Studies* Fiction	2 5	1 4	3			100
II		Enhancement Course Discipline-Specific		Fiction English Prose				25	75	
II	DSC2	Enhancement Course Discipline-Specific Core Course Discipline-Specific	UBEN2001	Fiction  English Prose  Allied – The History of English Literature(1350-1850)	5	4	3	25 25	75 75	100
11	DSC2	Enhancement Course Discipline-Specific Core Course Discipline-Specific Core Course Other Elective	UBEN2001 UBEN2002	Fiction  English Prose  Allied – The History of English Literature(1350- 1850)  Allied –The Social History of England	5 4	4 3	3	25 25 25	75 75 75	100
II	DSC2 DSC3 OEC2 OEC3	Enhancement Course Discipline-Specific Core Course Discipline-Specific Core Course Other Elective Course Other Elective Course Value-Based Course	UBEN2001 UBEN2002 UBENAL21	Fiction  English Prose  Allied – The History of English Literature(1350- 1850)  Allied –The Social History	5 4 5 3	4 3 4 3	3 3 3	25 25 25 25	75 75 75 75 75	100 100 100
II	DSC2 DSC3 OEC2	Enhancement Course Discipline-Specific Core Course Discipline-Specific Core Course Other Elective Course Other Elective Course Value-Based	UBEN2001 UBEN2002 UBENAL21 UBENAL22	Fiction  English Prose  Allied – The History of English Literature(1350- 1850)  Allied –The Social History of England  1. Physical Education –	5 4 5	3 4	3 3	25 25 25 25	75 75 75 75	100

			UBFUR301	Urdu III						
		Generic Elective (To choose 1 out of 4)	UBFAR301	Arabic III				25	75	100
	GE5		UBFHD301	Hindi III	4	4	3			
			UBFTA301	Tamil III	1					
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	Other Elective Course (To choose 1		UBURNM31	Basic Urdu I						
			UBARNM31	Basic Arabic I						
		(To choose 1	UBHDNM31	Basic Hindi I	2	1	3	25	75	100
		out of 4)	UBTANM31	Ithazhiyal I						
	DSC4	Discipline-Specific Core Course	UBEN3001	English Drama	5	4	3	25	75	100
III	DSC5	Discipline-Specific Core Course	UBEN3002	English Poetry	4	3	3	25	75	100
	OEC5	Other Elective Course	UBENAL31	Allied – The History of English Literature (1851-1950)	5	4	3	25	75	100
	OEC6	Other Elective	UBENAL32	Allied – New Criticism in	3	3	3	25	75	100
		Course Value-Based	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#						
	VBC3	Course (To choose 1 out of 2)[Online Exam]	UBVBC302	2. Physical Education – Sports II <sup>#</sup>	1	1	1	-	25	25
		Exam		TOTAL	30	25	-	175	550	725
		Generic Elective (To choose 1 out of 4)	UBFUR401	Urdu IV		4	3	25	75	
	GE7		UBFAR401	Arabic IV	1					
			UBFHD401	Hindi IV	4					100
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
			UBURNM41	Basic Urdu II		1	3	25	75	
		Other Elective Course	UBARNM41	Basic Arabic II	1					
	OEC7	(To choose 1	UBHDNM41	Basic Hindi II	2					100
		out of 4)	UBTANM41	Ithazhiyal II						
n.	DSC6	Discipline-Specific Core Course	UBEN4001	Shakespeare	6	5	3	25	75	100
IV	DSC7	Discipline-Specific	UBEN4002	American Literature	3	3	3	25	75	100
		Core Course Other Elective		Allied – History of	1					
	OEC8	Course	UBENAL41	English Language	5	3	3	25	75	100
	OEC9	Other Elective Course	UBENAL42	Allied – American Literary History	3	3	3	25	75	100
		Value-Based Course	UBVBC401	1. Cyber Security <sup>#</sup>						
	VBC4	(To choose 1 out of 2)[Online Exam]	UBVBC402	2. Entrepreneurship#	1	1	1	-	25	25
	INT1	Apprenticeship / Ir	nternship and F	Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	550	725
	DSC8	Discipline-Specific Core Course	UBEN5001	Twentieth Century Literature I	5	4	3	25	75	100

		Discipline-Specific	T					l	I	Ι
	DSC9	Core Course	UBEN5002	English Phonetics	5	4	3	25	75	100
	DSC10	Discipline-Specific Core Course	UBEN5003	English Language Teaching	5	4	3	25	75	100
	DSC11	Discipline-Specific Core Course	UBEN5004	African American Literature	4	4	3	25	75	100
	DSC12	Discipline-Specific Core Course	UBEN5005	Introduction to Literary Criticism	4	4	3	25	75	100
		Discipline-Specific	UBENDE51	Literary Movements in English						
٧	DSE1	Elective (To choose 1 out of 3)	UBENDE52	Nature Environment and Literature	5	4	3	25	75	100
		out or 3)	UBENDE53	3. Modern Linguistics						
		Skill Enhancement	UBENSE51	English for Competitive     Examinations I						
	SEE1	Elective Course (To choose 1 out of 3)	UBENSE52	English for Communication	2	1	3	25	75	100
		out of 3)	UBENSE53	3. Computer Literacy						
	INT1	Apprenticeship / Inte	ernship and Rep	oort 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC13	Discipline-Specific Core Course	UBEN6001	Twentieth Century Literature II	5	4	3	25	75	100
	DSC14	Discipline-Specific Core Course	UBEN6002	Journalism and Mass Communication	5	4	3	25	75	100
	DSC15	Discipline-Specific Core Course	UBEN6003	Common Wealth Literature	5	4	3	25	75	100
	DSC16	Discipline-Specific Core Course	UBEN6004	Gender Studies	4	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBEN6005	Creative Writing	4	4	3	25	75	100
		Discipline-Specific	UBENDE61	Studying English     Literature						
VI	DSE2	Elective (To choose 1 out of 3)	UBENDE62	The Great Women     Writers in the World     Literature	5 3	3	3	25	75	100
		,	UBENDE63	3. Interpreting Drama						
		Skill Enhancement	UBENSE61	English for Competitive     Examinations II						
	SEE2	Elective Course (To choose 1	UBENSE62	Business Writing in     English	2	1	3	25	75	100
		out of 3)	UBENSE63	3. Soft Skills for Success						
	INT1	Internship	UBENPJ61	Apprenticeship / Internship & Report 30+30+30 = 90##	-	30	3	25	75	100
	SEC2	Skill Enhancement Course	UBEXAC61	Extension Activities 40 <sup>a</sup> hrs	-	-	-	25	75	100
	VBC5	Value-Based Course	SWAYAM / O Bombay - MO	I Inline Spoken Tutorial by IIT OC®	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180		1075	3225	4400

The  $90^{\#}$  hours of Apprenticeship/Internship/Project and  $40^{\alpha}$  hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

### PROGRAMME SPECIFIC OUTCOME

PSO1	Identifies the economic and social conditions with societal belief.
PSO2	Compares the moral superiority of life in the urban and countryside.
PSO3	Relates the language scientific and non-scientific way of doing things.
PSO4	Discovers why people are complicit with their ideological constructions
PSO5	Uses the empirical methods to the poetic language
PSO6	Categorizes the fiction and non-fiction books
PSO7	Connects the language as study of reasoning and theory of language.
PSO8	Writes effectiveness of rational inquiry, logical and empirical investigatios.

## MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme	PROGRAMME OUTCOMES												
Specific Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10			
PSO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
PSO2	✓	✓		✓	✓	✓	✓	✓					
PSO3	✓	✓	✓	✓	✓	✓	✓	✓					
PSO4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
PSO5	✓	✓		✓	✓	✓	✓	✓	✓				
PSO6	✓	✓	✓	✓	✓	✓		✓					
PSO7	✓	✓	✓	✓	✓	✓	✓	✓		✓			
PSO8	✓	✓	✓	✓	✓	✓	✓		✓	✓			
Number of	matches	= 68. C	orrelatio	n: Verv I	liah	ı		•					

#### **MAPPING CORRELATION BENCHMARK**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

# PROGRAMME OUTCOMES (POS) FOR B.A HISTORY

### After the completion of B.A. History programme, the students will be able to

PO 1	Communicate in English, ideas, thoughts & knowledge effectively in conversations, and
	meetings & especially in a Digital environment. Develop linguistic skills in one Indian/Regional
	language
PO 2	Demonstrate domain-specific knowledge and its applications in real-life situations
PO 3	Synthesize learned knowledge and skills to effectively and efficiently perform the job duties of a profession
PO 4	Critically evaluate a situation and suggest a solution after careful consideration of the alternatives
PO 5	Exhibit potential to accomplish tasks independently or as a member or leader of a team
PO 6	Plan and Execute a Project after careful evaluation of the activities involved
PO 7	Develop products, Design Policies, and/or collaborate to help Society in building a Sustainable Environment
PO 8	Discover a passion for Lifelong Learning through MOOCs, ODL, and Self -Learning techniques through the optimum use of ICT
PO 9	Demonstrate ability towards critical thinking about his role as a responsible citizen
PO 10	Identify and assess various issues in Environment and suggest measures to overcome them.  Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future

# COURSE STRUCTURE OF B.A. HISTORY (For the candidates admitted from the academic year 2022-2023)

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
			UBFUR101	Urdu I						
	GE1	Generic Elective (To choose 1	UBFAR101	Arabic I	6	5	3	25	75	100
	GET	out of 4)	UBFHD101	Hindi I			٦	23	73	100
			UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education*	2	1	3	25	75	100
I	DSC1	Discipline - Specific Core Course	UBHI1001	History of India Up to CE 712	7	6	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB101	Professional Communication for Arts and Social Sciences**	3	3	3	25	75	100
	OEC1	Other Elective Course	UBHIAL11	Allied - Introduction to Tourism	7	5	3	25	75	100
	VBC1	Value-Based Course (To	UBVBC101	1. Moral Education <sup>#</sup>						
		choose 1 out of 2)[Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	150	475	625
		Generic Elective (To choose 1 out of 4)	UBFUR201	Urdu II	- 6				75	
	GE3		UBFAR201	Arabic II		5	3	25		100
	OL5		UBFHD201	Hindi II			J			100
			UBFTA201	Tamil II						
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100
	AEC2	Ability Enhancement Course	UBENV201	Environmental Studies*	2	1	3	25	75	100
II	DSC2	Discipline - Specific Core Course	UBHI2001	History of India from CE 712 to 1526	5	4	3	25	75	100
	DSC3	Discipline - Specific Core Course	UBHI2002	History of Tamil Nadu Up to CE 1336	4	3	3	25	75	100
	OEC2	Other Elective Course	UBHIAL21	Allied - Tourism Resources of India	5	4	3	25	75	100
	OEC3	Other Elective Course	UBHIAL22	Allied - Studies on States and Governments	3	3	3	25	75	100
		Value-Based Course	UBVBC201	Physical Education -     Sports I <sup>#</sup>	,	4			25	25
	VPC2	/To obsess 4 see		1	1	1	-	-	25	25
	VBC2	(To choose 1 out of 2)[Online Exam]	UBVBC202	2. Health & Wellness <sup>#</sup>						

			UBFUR301	Urdu III						
	055	Generic Elective	UBFAR301	Arabic III				0.		400
	GE5	(To choose 1 out of 4)	UBFHD301	Hindi III	4	4	3	25	75	100
		0.4,	UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Other Elective	UBURNM31	Basic Urdu I						
	OEC4	Course (To	UBARNM31	Basic Arabic I				0.5	75	400
	OEC4	choose 1 out of	UBHDNM31	Basic Hindi I	2	1	3	25	75	100
		4)	UBTANM31	Ithazhiyal I						
	DSC4	Discipline - Specific Core Course	UBHI3001	History of India from CE 1526 to 1707	5	4	3	25	75	100
III	DSC5	Discipline - Specific Core Course	UBHI3002	History of Tamil Nadu from CE 1336 to 1806	4	3	3	25	75	100
	OEC5	Other Elective Course	UBHIAL31	Allied - Tourism in South India	5	4	3	25	75	100
	OEC6	Other Elective Course	UBHIAL32	Allied - Constitutional History of India	3	3	3	25	75	100
	VDO	Value-Based Course (To	UBVBC301	1. N.C.C, N.S.S, YRC & RRC <sup>#</sup>						25
	VBC3 choose 1 out of 2)[Online Exam]		UBVBC302	2. Physical Education - Sports II#	1	1	1	-	25	
				TOTAL	30	25	-	175	550	725
	GE7		UBFUR401	Urdu IV						
		Generic Elective (To choose 1 out of 4)	UBFAR401	Arabic IV	4	4	3	25	75	100
			UBFHD401	Hindi IV		•				
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
		Other Elective	UBURNM41	Basic Urdu II					75	
	OEC7	Course (To	UBARNM41	Basic Arabic II	2	1	3	25		100
		choose 1 out of 4)	UBHDNM41	Basic Hindi II	_	-			. •	
			UBTANM41	Ithazhiyal II						
IV	DSC6	Discipline - Specific Core Course	UBHI4001	History of India from CE 1707 to 1857	6	5	3	25	75	100
	DSC7	Discipline Specific Core Practical	UBHI4002	History of Tamil Nadu from CE 1806 to 2010	3	3	3	25	75	100
	OEC8	Other Elective Course	UBHIAL41	Allied - Travel Agency Management	5	3	3	25	75	100
	OEC9	Other Elective Course	UBHIAL42	Allied - Development Administration in Tamil Nadu	3	3	3	25	75	100
		Value-Based Course (To	UBVBC401	1. Cyber Security <sup>#</sup>						
	VBC4	choose 1 out of 2)[Online Exam]	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1	-	25	25
	INT1	Apprenticeship / In	nternship and R	ernship and Report 30 hrs per Semester			-	-	-	-
				TOTAL	30	25	-	175	550	725

	DSC8	Discipline - Specific Core Course	UBHI5001	History of India from CE 1857 to 1947	5	4	3	25	75	100
	DSC9	Discipline - Specific Core Course	UBHI5002	History of the Arabs from CE 500 to 750	5	4	3	25	75	100
	DSC10	Discipline - Specific Core Course	UBHI5003	History of the USA from Colonization to CE 1865	5	4	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBHI5004	History of Europe from CE 1453 to 1789	4	4	3	25	75	100
	DSC12	Discipline - Specific Core Course	UBHI5005	History of China from CE 1900 to 2000	4	4	3	25	75	100
		Discipline-	UBHIDE51	Intellectual History of Modern India						
V	DSE1	Specific Elective (To choose 1 out of 3)	UBHIDE52	2. History of Science and Technology in India from CE 1750 to 1900	5	4	3	25	75	100
		,	UBHIDE53	3. Select Constitutions						
		Skill	UBHISE51	1. General Knowledge						
	SEE4	Enhancement	UBHISE52	2. Introduction to	_		_	25	75	100
	SEE1	Elective Course (To choose 1 out		Archaeology 3. Introduction to	2	1	3	25	75	100
		of 3)	UBHISE53	Museology						
	INT1	Apprenticeship / Int	ternship and Re	port 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC13	Discipline - Specific Core Course	UBHI6001	History of India from CE 1947 to 2014	5	4	3	25	75	100
	DSC14	Discipline - Specific Core Course	UBHI6002	History of the Arabs from CE 750 to 1258	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBHI6003	History of the USA from CE 1865 to 2014	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBHI6004	History of Europe from CE 1789 to 2000	4	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBHI6005	Muslim's Contribution to Humanity	4	4	3	25	75	100
		Discipline-	UBHIDE61	Intellectual History of     Modern Tamil Nadu						
VI	DSE2	Specific Elective (To choose 1 out of 3)	UBHIDE62	2. History of Science and Technology in India from CE 1900 to 2014	5	3	3	25	75	100
			UBHIDE63	3. Indian Constitution						
		Skill	UBHISE61	Competitive     Examinations						
	SEE2	Enhancement Elective Course (To choose 1 out of 3)	UBHISE62	Introduction to     Epigraphy and     Numismatics	2	1	3	25	75	100
			UBHISE63	3. Archives Keeping						
	INT1	Internship	UBHIPJ61	Apprenticeship / Internship & Report 30+30+30=90##	-	30	3	25	75	100
	SEC2	Skill Enhancement Course	UBEXAC61	Extension Activities 40°	-	-	-	25	75	100

		GRAND TOTAL	180	180	-	1075	3225	4400
		TOTAL	30	55	-	225	675	900
VBC5	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC <sup>®</sup>	-	1	ı	-	1	1

The 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40<sup>a</sup> hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline -Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

# Programme Specific Outcomes (PSOs) of the UG Programme in History After the completion of B.A. History programme, the students will be able to

PSO 1	Explain the evolution, growth and progress of human Civilization in different parts of the world and India, and acquire the attributes and values required for the development of our World and our Nation.
PSO 2	Discover skills required for career building through competitive examinations, develop skills required to be employed in other allied disciplines and pursue higher education in Historical Studies and Allied Disciplines
PSO 3	Recognize the manifold factors influencing the development of an administrative structure and national policies that impact the society, economy and culture and develop the qualities to become good administrators.
PSO 4	Use the leadership qualities acquired like decision-making ability, knowledge of allied disciplines, developing self-learning skills and art of communication to express their viewpoints.
PSO 5	Recognize the varied historical narratives from various sources and critically interpret narratives with the capacity to effectively communicate individual opinions.
PSO 6	Interpret the implication of the past on the present and acknowledge its relevance in future development.
PSO 7	Identify and effectively communicate the problems in the relevant field of study and apply the acquired knowledge to work for better solutions.

PSO 8 Develop the passion to be a lifelong learner with the ability to construct a self-developed Bibliography on any area of interest and utilize e-resources and libraries to acquire the knowledge.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme				Prog	ramme	Outcon	nes (POs	5)		
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓		✓		✓	✓	✓	✓
PSO2	✓	✓	✓			✓		✓		
PSO3		✓	✓	✓	✓		✓		✓	✓
PSO4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO6		✓	✓	✓	✓	✓	✓		✓	✓
PSO7		✓	✓	✓	✓	✓	✓		✓	✓
PSO8	✓	✓	✓		✓	✓		✓		
Number o	of Matc	hes = 6	2 Correl	ation: \	ery Hig	h		•		

### **MAPPING CORRELATION BENCHMARK**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### PROGRAMME OUTCOMES FOR BACHELOR OF BUSINESS ADMINISTRATION

#### At the end of the BBA Programme, the students will be able to

- PO1 Communicate ideas, thoughts & knowledge through English effectively with individuals, groups, and businesses using Verbal, Non-Verbal, and Digital modes of Communication. Develop linguistic skills in one Indian/Regional language
- PO2 Demonstrate knowledge of the concepts, principles, theories, and techniques related to valious forms, facets, and functions of Business
- PO3 Synthesize learned knowledge and acquired skills to establish, organize, manage and/or develop a business/organisation effectively and efficiently in the capacity of an entrepressur businessman, or any other professional
- PO4 Critically evaluate a problem/environment and take informed by mess decisions to solve problems
- PO5 Exhibit potential to accomplish tasks independently or as a complex or leader of a team
- PO6 Use Computers, Software, Internet, and other to too to maximize resource utilization and increase efficiency in day-to-day business operations
- PO7 Plan, execute, and manage a Project after a rout appraisal
- PO8 Develop products, Frame Policies, a d/or collaborate to help Society in increasing living standards and towards building a Sustain Le Environment
- PO9 Discover a passion for Licelong Learning through MOOCs, ODL, and Self -Learning techniques through the optimum use of ICT.
- PO10 Identify and as as various issues in Environment and suggest measures to overcome them. Exhibit Enic and Values in professional, Social, and Personal spheres of life, caring for the unde originated, leading to a better sustainable future

				OR BUSINESS ADMINISTRA						
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
			UBFUR101	Urdu I						Y
	054	Generic Elective	UBFAR101	Arabic I		_		0.5		
	GE1	(To choose 1 out of 4)	UBFHD101	Hindi I	6	5	3	25	75	700
			UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	5	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education*	2	1		25	75	100
ı	DSC1	Discipline - Specific Core Course	UBBA1001	Financial Accounting (B.Com, B.Com.CA, B.Com. F & A, BBA)	1	8	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB102	Professional Communication for Commerce and Management**		3	3	25	75	100
	OEC1	Other Elective Course	UBBAAL11	Allied - Business Stats es	7	5	3	25	75	100
	VBC1	Value-Based	UBVBC101	1. Moral Education						
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Course (To choose 1 out of 2)[Online Exam]	UBVBC102	2. Physical Education – Yogat	1	1	1	-	25	25
				TOTAL	30	25	-	150	475	625
			UBFUR201	P Ann						
		Generic Elective	UBFAR201	Arabic II						
	GE3	(To choose 1 out of 4)	UBFHD 01	Hindi II	6	5	3	25	75	100
		01 4)	UBITA20	Tamil II						
	GE4	Generic Elective	UN EN 201	English II	4	4	3	25	75	100
	AEC2	Ability Enhancement Course	03ENV201	Environmental Studies*	2	1	3	25	75	100
II	DSC2	Discipline Specific Core Course	UBBA2001	Business Environment	5	4	3	25	75	100
	DSC3	Discipline cocific Core	UBBA2002	Business Management (B.Com, B.Com.CA, B.Com.F& A, BBA)	4	3	3	25	75	100
	OFC2	ther Elective ourse	UBBAAL21	Allied - Operations Research	4	4	3	25	75	100
•	OE 3	Other Elective Course	UBBAAL22	Allied - Consumer Behaviour	4	3	3	25	75	100
R	VBC2	Value-Based Course	UBVBC201	1. Physical Education - Sports I <sup>#</sup>	1	1	1	-	25	25
	<u></u>	(To choose 1 out of 2)	UBVBC202	2. Health & Wellness <sup>#</sup>						
				TOTAL	30	25	-	175	550	725
	DSC4	Discipline - Specific Core Course	UBBA3001	Strategic Management	5	4	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBBA3002	Business Regulatory Framework (B.Com, B.Com.CA, B.Com. F & A, BBA)	4	4	3	25	75	100

									•	•
		Discipline -		Modern Marketing						
	DSC6	Specific Core	UBBA3003	(B.Com, B.Com.CA, B.Com.	4	4	3	25	75	100
		Course	LIDDANIMOA	F&A, BBA)						
		Other Elective	UBBANM31	Business Organization						
	OEC4	Course (To choose 1 out	UBBANM32	Customer Relationship Management	4	2	3	25	75	100
III		of 3)	UBBANM33	Supply Chain Management						
•	OEC5	Other Elective Course	UBBAAL31	Allied – Business Taxation	4	4	3	25	75	70
				Allied – Business						
	OEC6	Other Elective	UBBAAL32	Economics	4	3	3	25	75	100
		Course		(B.Com, B.Com.CA, B.Com. F&A, BBA)				X		
		Skill Enhancement			_	_				
	SEC2	Lab Course	UBBASEP3	Tally Basics - Lab	4	3		25	75	100
		Value-Based	UBVBC301	1. N.C.C, N.S.S, YRC &						
	VBC3	Course	05150001	RRC <sup>#</sup>	1	V		_	25	25
		(To choose 1 out of 2)	UBVBC302	2. Physical Education – Sports II <sup>#</sup>		<b>&gt;</b>	<u> </u>			
		01 2)		· ·		05		475	- F-C	705
		Discipling		TOTAL Production & Metarials	30	25	-	175	550	725
	DSC7	Discipline - Specific Core	UBBA4001	Production & Materials  Management	5	4	3	25	75	100
	DSCI	Course	OBBA4001	Management	3	-	3	25	75	100
		Discipline -		Company Law						
	DSC8	Specific Core	UBBA4002	(B.Com, B.Com, CA, B.Com.	4	4	3	25	75	100
		Course		F&A, BBA)						
		Discipline Specific		Modern Banking						
	DSC9	Core	UBBA4003	(B.Con, B.Com, CA, B.Com, F&, BB)	4	4	3	25	75	100
ŀ		Other Elective	UBBANM41	It lernational Business						
	0507	Course	UBBANM42	ogistic Management	١,	_		0.5	7.5	400
	OEC7	(To choose 1 out		7	4	2	3	25	75	100
V		of 3)	UBBAN //42	Brand Management						
	SEC3	Skill Enhancement Lab Course	UBL ASEP4	Tally - Advanced - Lab	4	3	3	25	75	100
ĺ	OEC8	Other Elective	UBBAAL41	Allied - Organisational	4	4	3	25	75	100
	0200	Course	BUILDE	Behaviour	_		J	20	70	100
	OEC9	Other Elective	UBBAAL42	Allied - Training and	4	3	3	25	75	100
		Course		Development of Employees						
		Value-Based Course	UBVBC401	1. Cyber Security <sup>#</sup>						
	VBC4	Coche se 1 out	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1	-	25	25
		0.2)	0BVBC402	2. Entrepreneursinp						
	INT1	Apprenticeship	/ Internship and	Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	550	725
		Discipline -		Accounting for Managerial						
	D°C 10	Specific Core	UBBA5001	Decisions	5	5	3	25	75	100
	/	Course Discipline -								
	DSC11	Specific Core	UBBA5002	Financial Management	5	4	3	25	75	100
		Course					Ĺ			
	D0015	Discipline -	LIDDATOS	Export Management			_	05	7.	400
	DSC12	Specific Core Course	UBBA5003		5	4	3	25	75	100
ŀ		Discipline -		Human Resource						
	DSC13   Specific Core   U	UBBA5004	Management (B.Com,	5	4	3	25	75	100	
		Course		B.Com.CA, B.Com. F& A, BBA)			1			1

		T						ı		
	DSC14	Discipline - Specific Core Course	UBBA5005	Total Quality Management	3	3	3	25	75	100
		Discipline-Specific	UBBADE51	Retail Management						
	DSE1	Elective (To	UBBADE52	Services Marketing	5	4	3	25	75	100
		choose 1 out of 3)	UBBADE53	3 . Time Management						
		Skill Enhancement Elective Course	UBBASEP5	1. MS- Office- Basics – (Lab)						<b>(</b> -)
	SEE1	(To choose 1 out	UBBASE52	2. SPSS – Basics	2	1	3	25		100
		of 3)	UBBASE53	3. DBMS- Basics				^		
	INT1	Apprenticeship	/ Internship and	Report 30 hrs per Semester	-	-	-			-
				TOTAL	30	25		7. 15	525	700
	DSC15	Discipline - Specific Core Course	UBBA6001	Marketing Research	5	5	8	25	75	100
	DSC16	Discipline - Specific Core Course	UBBA6002	Industrial Relations	5	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBBA6003	Advertising and Salesmanship		4	3	25	75	100
	DSC18	Discipline - Specific Core Course	UBBA6004	Entrepreneurial Development (B.Com, B.Com.CA, P.Co.). F& A, BBA)	5	3	3	25	75	100
	DSC19	Discipline - Specific Core Course	UBBA6005	Digital Mark and	3	3	3	25	75	100
VI	DSE2	Discipline-Specific Elective	UBBADE61	1. E-Cam accept (B.Cam, L. Com.CA, B.Com.	- 5	4	3	25	75	100
	DOLZ	(To choose 1 out of 3)	UBBADE62	Change Management	7	4		23	73	100
		013)	UBBADF63	3. Business Ethics						
		Skill Enhancement Elective Course	UBBASEPS	1. MS Office- Advanced – (Lab)						
	SEE2	(To choose 1 out	UNFALE82	2. SPSS-Advanced	2	1	3	25	75	100
		of 3)	IBBASE63	3. DBMS- Advanced						
	INT1	Internship	UBBAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC4	Skill Enhancement Course	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	VBC5	ake-based Couse		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
	V			GRAND TOTAL	180	180	-	1075	3225	4400

te 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40° hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in Grand Total but not considered for CGPA. Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

### Programme Specific Outcomes (PSOs) For Bachelor of Business Administration

#### At the end of the BBA Programme, the students will be able to

- **PSO1**: Communicate management principles, thoughts and ideas effectively with individuals, groups and organizations.
- **PSO2**: Demonstrate knowledge of Management concepts, principles, theories and techniques related to finance, HR, production and marketing.
- **PSO3:** Synthesize learned Knowledge and acquired skills to plan, organize, direct and control a business or organization, effectively and efficiently as an entrepreneur, businessman or professional
- **PSO4:** Critically evaluate problems related to Work-Life and take appropriate decisions to solve the problems.
- **PSO5**: Exhibit potential to accomplish professional tasks independently, as a team number and/or team leader.
- **PSO6**: Develop products and services; collaborate with organizations to servicety in increasing the living standards and building a sustainable environment.
- **PSO7**: Identity, plan, execute, and manage projects after careful policisal with professional ethics and values.
- **PSO8**: Use online/offline information & communication to its antiechnologies and develop a passion for lifelong learning through MOOCs, ODL, and self-learning techniques.

COURSES	OURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & Eng (GE)	4	18	100	400
Ability Enhancement Course (AFX)	4	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement C to the (SEC)	3	9	100	300
Other Elective Course - Allied (OEC)	9	28	100	900
Discipline Specific Core Course (DSC)	19	78	100	1900
Disciple Specific Elective (DSE)	2	8	100	200
Ski Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

PSOs					РО	s (B.Co	m/BBA)				
(BBA)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	TOTAI (80)
PSO1	✓	✓	✓	<b>✓</b>	✓	<b>√</b>	<b>✓</b>	<b>✓</b>		1	3
PSO2	✓	✓	✓	1	✓	✓	<b>√</b>	✓			9
PSO3	✓	✓	✓	✓	✓	✓	✓	✓	1		9
PSO4		✓	✓	✓	✓		✓	<b>✓</b>		1	8
PSO5		✓	✓	✓	✓	✓	✓				8
PSO6	✓	✓	✓		✓	 	· C		<b>~</b>		7
PSO7	<b>✓</b>	✓	✓		✓	<b>V</b>	3		✓	<b>✓</b>	8
PSO8	✓	✓	✓				<b>/</b>	✓	✓		7
TOTAL	6	8	8	5	7	6	8	7	5	5	65

## MAPRING RRELATION BENCHMARK

	Mapping	1-30%	31-60%	61-70%	71-100%
	Matche	1-24	25-50	51-56	57-80
	Correlation	Poor	Moderate	High	Very High
C					
Office of the second					

## PROGRAMME OUTCOMES (POs) for B.C.A

# By the end of the programme, the students will be able to

Communicate in English, the ideas, findings, and results effectively through converse meetings, and reports, especially through digital means. Develop linguistic skills in Indian/Regional language  Demonstrate knowledge of the concepts, principles, theories, and techniques of the doma allied subject areas.  Pos Synergise knowledge with Analytical & Experimental skills to systematically bear programs/carry out experiments/formulate & prove theories to enrich the body of kin wedge.  Pos Synthesize learned knowledge and acquired skills to Identify and critically analyze per problems in the relevant discipline using appropriate tools and techniques.  Pos Exhibit potential to accomplish tasks independently or as a member of leaser of a team  Pos Utilize specialized instruments and equipment, Computers, Stituare, Internet, and other IC to carry out experiments
PO3 Synergise knowledge with Analytical & Experimental skills to systematically cear programs/carry out experiments/formulate & prove theories to enrich the body of knowledge.  PO4 Synthesize learned knowledge and acquired skills to Identify and critically analyze per problems in the relevant discipline using appropriate tools and techniques.  PO5 Exhibit potential to accomplish tasks independently or as a member of eacer of a team  Utilize specialized instruments and equipment, Computers, Sufficient Internet, and other IC-
programs/carry out experiments/formulate & prove theories to enrich the body of kin weege  Synthesize learned knowledge and acquired skills to Identify and critically analyze per problems in the relevant discipline using appropriate tools and techniques.  PO5 Exhibit potential to accomplish tasks independently or as a member of leaver of a team  Utilize specialized instruments and equipment, Computers, Saturate Internet, and other IC
problems in the relevant discipline using appropriate tools and techniques.  PO5 Exhibit potential to accomplish tasks independently or as a member of eacer of a team  Utilize specialized instruments and equipment, Computers, Sufficience internet, and other IC
Utilize specialized instruments and equipment, Computers, Siftware Internet, and other IC
PO7  Demonstrate knowledge and scientific understanding design experiments, use appropriate methodologies, analyze and interpret data and provide solutions, and Exhibit organizational and the ability to manage time and resources.
PO8 Create Compounds/Products/Software or Design experiments and/or collaborate to help Social building a Sustainable Environment
PO9 Discover a passion for Lifelong L arm g through MOOCs, ODL, and Self -Learning tech through the optimum use of ICT
PO10 Identify and assess various issues in Environment and suggest measures to overcome Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring funderprivileged, leading to a better sustainable future

# BACHELOR OF COMPUTER APPLICATIONS [B.C.A] (For the candidates admitted from the academic year 2022-2023)

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	<b>3</b>
			UBFUR101	Urdu I						
	GE1	Generic Elective	UBFAR101	Arabic I		5	2	25		100
	GEI	(To choose 1 out of 4)	UBFHD101	Hindi I	6	5	3	6	15	100
			UBFTA101	Tamil I		4				
	GE2	Generic Elective	UBFEN101	English I	4			25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education *	2	1	3	25	75	100
	DSC1	Discipline - Specific Core Course	UBCC1001	Digital Logic Fundamentals & Microprocessors	1.1	7	3	25	75	100
I	SEC1	Skill Enhancement Course	UBSKB103	Professional Communication for Physical Sciences*	3	3	3	25	75	100
		Discipline-Specific Core Practical		Programming in C. Lab	3	-	-	-	-	-
	OEC1	Other Elective Course	UBCCAL11	Allied - Martematical Foundation I	5	5	3	25	75	100
	OECI	Other Elective Course		Allied Mathematical Foundation - Lab	3	-	-	-	-	-
	VBC1	Value-Based Course (To	UBVBC101	. Meral Education <sup>#</sup> 2. Physical Education –	1	1	1	_	25	25
		choose 1 out of 2)[Online Exam]	UBVBC102	Yoga <sup>#</sup>	'	'	L'	-		25
				TOTAL	30	22	-	150	475	625
			UP. UR201	Urdu II						
	GE3	Generic Elective (To choose 1	ULFAR201	Arabic II	6	5	3	25	75	100
	GES	out of 4)	BFHD201	Hindi II				25	75	100
			UBFTA201	Tamil II						
	GE4	Gen Elective	UBFEN201	English II	4	4	3	25	75	100
	AEC2	Ability Engancement	UBENV201	Environmental Studies *	2	1	3	25	75	100
II	DSC2	Logoline - Specific Core Course	UBCC2001	Programming in C & Algorithm	6	6	3	25	75	100
	0.10	Other Elective Course Course	UBCCAL21	Allied - Mathematical Foundation II	4	5	3	25	75	100
0	<b>6</b> C3	Other Elective Course Course	UBCCAP21	Allied - Mathematical Foundation - Lab	4	3	3	25	75	100
	VBC2	Value-Based Course (To choose 1	UBVBC201	1. Physical Education - Sports I <sup>#</sup>	1	1	1		25	OF.
	VBC2	out of 2)[Online Exam]	UBVBC202	2. Health & Wellness <sup>#</sup>					<b></b> _	25
				TOTAL	30	28	-	175	550	725
III	DSC4	Discipline - Specific Core Course	UBCC3001	C++ & Data Structures	6	5	3	25	75	100
'''	DSC5	Discipline - Specific Core Course	UBBC3002	Computer Oriented Statistical Method	5	4	3	25	75	100

	2000	Discipline - Specific	LIDOODDOA	C++ & Data Structures -						400
	DSC6	Core Course	UBCCPR31	Lab	3	3	3	25	75	100
		Other Elective Course	UBBCNM31	1. Enterprise Resource Planning						
	OEC4	(To choose 1	UBBCNM32	2. Computer Graphics	4	2	3	25	75	100
		out of 3)	UBBCNM33	3. Theory of Computation						
		Other Elective	UBCCAL31	Allied - Computer Oriented Financial						0
	OEC5	Course (To	02007.201	Accounting I	5	4	3	25	75	1 9
		choose 1 out of 2)	UBCCAL32	Allied - Discrete Mathematics					1	
				Allied - Computer						
		Other Elective	UBCCAP31	Oriented Financial						
	OEC6	Course (To	0_000	Accounting	3	3		25	75	100
		choose 1 out of 2)		- Lab I Allied - Discrete	_			/		
			UBCCAP32	Mathematics - Lab		7				
	SEC2	Skill Enhancement	UBBCSEP3	Computer Oriented	2	2	3	25	75	100
	SEC2	Course	UBBCSEFS	Statistical Method - Lab I	3	3/	3	25	75	100
	VBC3	Value-Based Course (To	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#		1	1	_	25	25
	VB03	choose 1 out of 2)[Online Exam]	UBVBC302	2. Physical Education Sports II <sup>#</sup>		•	ľ		23	20
				TOTAL	30	25	-	175	550	725
	DSC7	Discipline - Specific Core Course	UBCC4001	Programming in Java	6	5	3	25	75	100
	DSC8	Discipline - Specific Core Course	UBCC4002	Data Lining & Data Walk houring	5	4	3	25	75	100
	DSC9	Discipline Specific Core Practical	UBCCPR41	R ogi liming in Java -	3	3	3	25	75	100
		Other Elective	UBBCNM4	1. Digital Marketing Analytics						
	OEC7	Courses (To	UBBC WIP 2	2. Multimedia	4	2	3	25	75	100
		choose 1 out of 3)	UP CNM43	3. Object Oriented Analysis and Design						
	SEC3	Skill Enhancement	UBBCSEP4	Data Mining - Lab	3	3	3	25	75	100
IV		Course		Allied - Computer						
		Other Election	UBCCAL41	Oriented Financial	_					
	OEC8	Course (To		Accounting II	5	4	3	25	75	100
		Charles Out of 2)	UBCCAL42	Operation Research						
				Allied - Computer						
	OEC9	Other Elective ourse ( <b>To</b>	UBCCAP41	Oriented Financial Accounting – Lab II	3	3	3	25	75	100
	U J	choose 1 out of 2)		Operation Research -	_ 3	3	3	20	75	100
			UBCCAP42	Lab						
	VBC4	Value-Based Course <b>(To</b>	UBVBC401	1. Cyber Security <sup>#</sup>	1	1	1	_	25	25
	, , , , ,	choose 1 out of 2)	UBVBC402	2. Entrepreneurship <sup>#</sup>		'	'		20	
	INT1	Apprenticeship / Inte	rnship and Repo	rt 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	550	72
	DSC10	Discipline - Specific Core Course	UBCC5001	Machine Learning: Data Mining Using Python	6	5	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBCC5002	Computer Network	6	5	3	25	75	100

	1	D: : :: 0 :::		T	1	1	1		1	
	DSC12	Discipline - Specific Core Course	UBCC5003	Operating Systems	5	4	3	25	75	100
	DSC13	Discipline - Specific Core Course	UBCCPR51	Data Mining using Python Lab	3	3	6	25	75	100
	DSC14	Discipline - Specific Core Course	UBCCPR52	Computer Network Lab	3	3	6	25	75	100
		Discipline-Specific	UBCCDE51	Programming in R						
V	DSE1	Elective (To	UBCCDE52	2. Deep Learning	5	4	3	25	75	100
		choose 1 out of 3)	UBCCDE53	3. Digital Image Processing						
		Skill Enhancement	UBCCSE51	1. Programming in R Lab					1	
	SEE1	Elective Course (To choose 1 out	UBCCSE52	2. Deep Learning Lab	2	1	3	25	75	100
		of 3)	UBCCSE53	3. Cloud Computing			4	71		
	INT1	Apprenticeship / Inter	rnship and Repo	ort 30 hrs per Semester	-	-	-		-	-
				TOTAL	30	25		15	525	700
	DSC15	Discipline - Specific Core Course	UBCC6001	Database Management Systems	6	5	3/	25	75	100
	DSC16	Discipline - Specific Core Course	UBCC6002	Software Engineering	6		3	25	75	100
	SEC5	Skill Enhancement Course	UBCCPJ62	Software Project & Viva Voce	3	3	6	25	75	100
	DSC17	Discipline - Specific Core Course	UBCCPR61	Database Managemer Systems - Lab	3	3	6	25	75	100
	DSC18	Discipline - Specific Core Course	UBCCPR62	Mobile Application Development				25	75	100
		Discipline-Specific	UBCCDE61	1. Big Data and Analytics						
	DSE2	Elective (To choose	UBCCDE62	2. Oper Source Program ing	5	4	3	25	75	100
VI		1 out of 3)	UBCCDE63	3. Business intelligence and A. all ics						
		Skill Enhancement	UBCCSE6**	Lab						
	SEE2	Elective Course (To choose	UBCC 51-62	Open Source     Programming Lab	2	1	3	25	75	100
		1 out of 3)	UL CCSE63	Business Intelligence and     Analytics - Lab						
	INT1	Internship	UBCCPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC5	Skill Enhanced Into	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	VBC5	Value ased Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC <sup>®</sup>	-	1	-	-	-	-
		<b>\</b> //		TOTAL	30	55	-	225	675	900
		1		GRAND TOTAL	180	180	-	1075	3225	4400

The 90<sup>##</sup> curs of Apprenticeship/Internship/Project and 40<sup>α</sup> hours of Extension Activities shall be apart from the regular teaching burs. The Marks awarded for Extension Activity are included in Grand Total but not considered for CGPA. \*Handled by the poartment of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Total by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	4	18	100	400
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	3	9	100	300
Other Elective Course – Allied (OEC)	9	28	100	900
Discipline - Specific Core Course (DSC)	19	78	100	70/
Discipline-Specific Elective (DSE)	2	8	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30		100
Total	47	180		4400

## PROGRAMME SPECIFIC OUTCOMES (PSOs) for B.C.A

# By the end of the programme, he students will be able to

PSO1 Computational Ability: Implementing undermentals of computing, computing specialization and domain knowledge suitable for job placement.  PSO2 Problem Analysis: Identity, for addite and analyze complex real-life problems in terms of mathematical modelling and computer science.	t ——
PSO3 Design /Development of solutions: Design algorithms for complex, real-world problems throughouting systems components or processes.	h
PSO4 Investigate Polyenia. Ability to analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data.	the
PSO5 Exploration. Ability to explore the stored data to bring out valuable information.	
PSO6 Professional ethics: Ability to perform professional practices ethically, keeping in mind cyber regulations & laws.	
Self-learning: Ability to engage in independent learning for continuous self-development as a computing professional.	
Communication: Ability to effectively communicate with the technical community	
PSO9 Individual and Teamwork: Ability to work in a hierarchical team both as a member and leader.	
PSO10 Innovation and entrepreneurship: Ability to apply innovative ideas to become an entrepreneur	

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific				Pro	gramme	Outcom	es (POs)			
Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	✓	<b>\</b>			✓	<	<b>✓</b>			7
PSO2	✓		✓	✓	✓		✓		.(	
PSO3	✓	<b>√</b>	✓	<b>√</b>			✓			
PSO4	✓	<b>√</b>	<b>√</b>	<b>√</b>			✓	<b>\( \)</b>		
PSO5	✓				✓	✓	<b>/</b>	<b>\</b> '\	<b>√</b>	
PSO6	✓	✓	✓	<b>√</b>	✓		1.	<b>V</b>		<b>✓</b>
PSO7	✓				✓			<b>√</b>	<b>√</b>	
PSO8	✓	<b>✓</b>	✓	<b>√</b>	<b>V</b>		<b>7</b>	<b>√</b>	<b>√</b>	<b>✓</b>
PSO9	✓				16			✓	<b>√</b>	
PSO10	✓					<b>√</b>	✓	<b>√</b>		<b>✓</b>

## NNG CORRELATION BENCHMARK

	. 🖤				
	Mapping	1/30%	31-60%	61-70%	71-100%
	Matc. 2	1-24	25-50	51-56	57-80
	Correlation	Poor	Moderate	High	Very High
REPLAC			*****		

# B.COM. DEGREE PROGRAMME (CBCS PATTERN) PROGRAMME OUTCOMES

- PO1 Communicate ideas, thoughts & knowledge through English effectively with individuals, groups, and businesses using Verbal, Non-Verbal, and Digital modes of Communication. Develop linguistic skills in one Indian/Regional language
- PO2 Demonstrate knowledge of the concepts, principles, theories, and technical related to various forms, facets, and functions of Business
- PO3 Synthesize learned knowledge and acquired skills to establish, organite, manage and/or develop a business/organisation effectively and efficiently in the capacity of an entrepreneur, businessman, or any other professional
- PO4 Critically evaluate a problem/environment and take informed business decisions to solve problems
- PO5 Exhibit potential to accomplish tasks independently as a member or leader of a team
- PO6 Use Computers, Software, Internet, and other ICT tools to maximize resource utilization and increase efficiency in day to day business operations
- PO7 Plan, execute, and manage a Project after careful appraisal
- PO8 Develop products, Frame Periols, and/or collaborate to help Society in increasing living standards and towards uiding a Sustainable Environment
- PO9 Discover a passion for Elelong Learning through MOOCs, ODL, and Self -Learning techniques through the optimum use of ICT.
- PO10 Identify and traess various issues in Environment and suggest measures to overcome them. Exhibit Ethics and Values in professional, Social, and Personal spheres fore, caring for the underprivileged, leading to a better sustainable future

		(For the		STRUCTURE FOR COMME		122-20	1231			
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	10
		Generic	UBFUR101	Urdu I						
	GE1	Elective	UBFAR101	Arabic I	6	5	3	24		100
	OL.	(To choose 1 out of 4)	UBFHD101	Hindi I	] ~					100
		,	UBFTA101	Tamil I			_			
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
1	AEC1	Ability Enhancement Course	UBVED101	Value Education *	2		3	25	75	100
I	DSC1	Discipline - Specific Core Course	UBCO1001	Financial Accounting I (B.Com, B.Com.CA, B.Com. F.A. BBA)	7	6	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB102	Professional Communication for Commerce and Management**	3	3	3	25	75	100
	OEC1	Other Elective Course	UBCOAL11	Allied - Modern Rusiness Organisation	7	5	3	25	75	100
	VBC1	Value-Based	UBVBC101	1. Moral El ucaton#						
		Course (To choose 1 out of 2) [Online Exam]	UBVBC102	2 Ys Education – Yoga <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	150	475	625
		O a mania	UBFUR2	Jardu II						
	GE3	Generic Elective	UBFA 201	Arabic II	1	5	3	25	75	400
	GES	(To choose 1	(BF) 17201	Hindi II	6					100
		out of 4)	UB. TA201	Tamil II						
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100
	AEC2	Ability Explanatement	UBENV201	Environmental Studies *	2	1	3	25	75	100
II	DSC	Discipline - Secific Core Course	UBCO2001	Financial Accounting II (B.Com, B.Com.CA, B.Com.F &A, BBA)	5	4	3	25	75	100
•	D &3	Discipline - Specific Core Course	UBCO2002	Business Management (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	3	3	25	75	100
	ØEC2	Other Elective Course	UBCOAL21	Allied - Leadership and Team Development	4	4	3	25	75	100
	OEC3	Other Elective	UBCOAP21	Allied - Computer	4	3	3	25	75	100
		Course Value-Based	UBVBC201	Applications in Business - Lab  1. Physical Education - Sports I <sup>#</sup>						
	VBC2	Course (To choose 1 out of 2) [Online Exam]	UBVBC202	2. Health & Wellness <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	175	550	725

	1	1	1	T		1				
	DSC4	Discipline - Specific Core Course	UBCO3001	Corporate Accounting I (B.Com, B.Com.CA, B.Com. F&A, BBA)	5	4	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBCO3002	Business Regulatory Framework (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	100
	DSC6	Discipline - Specific Core Course	UBCO3003	Modern Marketing (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	150
		Other Elective	UBCONM31	Business And Professional Ethics						
Ш	OEC4	Course (To choose 1	UBCONM32	Marketing Communications	4	2	3	25	70	100
•••		out of 3)	UBCONM33	Customer Relationship Management						
	OEC5	Other Elective Course	UBCOAL31	Allied – Business Statistics and Operations Research I	5	4	3		75	100
	OEC6	Other Elective Course	UBCOAL32	Allied - Business Economics (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	3		25	75	100
	SEC2	Skill Enhancement Lab Course	UBCOSEP3	Computerised Accounting I - Lab	1	3	3	25	75	100
		Value-Based	UBVBC301	1. N.C.C, N.S.S, YRC & RR #	4					
	VBC3	Course (To choose 1 out of 2) [Online Exam]	UBVBC302	2. Physical Education Sports II <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	175	550	725
	DSC7	Discipline - Specific Core Course	UBCO4001	Corporate Accounting II (B.Com, L.Co. A., B.Com.F &A, BBA)	5	4	3	25	75	100
	DSC8	Discipline - Specific Core Course	UBCO4002	B.Com, CA, B.Com. F&A, BBA)	4	4	3	25	75	100
	DSC9	Discipline Specific Core	UBCO4003	Modern Banking (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	100
		Other Elective	ULC JI MAI	Project Management						
	OEC7	Course (To	IBCOMM42	Retail Management	4	2	3	25	75	100
11.7		choose 1 out of 3)	UBCONM43	Consumer Protection Act	1					
IV	SEC3	Skill Enhancement La Co rse	UBCOSEP4	Computerised Accounting II - Lab	3	3	3	25	75	100
	OEC8	Othe Lective	UBCOAL41	Allied – Business Statistics and Operations Research II	5	4	3	25	75	100
	OEC.	Other Elective Course	UBCOAL42	Allied – Goods and Services Tax	4	3	3	25	75	100
•	<b>Y</b> /	Value-Based	UBVBC401	1. Cyber Security <sup>#</sup>						
	<b>V3C4</b>	Course (To choose 1 out of 2)	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1	-	25	25
	INT1	· · · · · · · · · · · · · · · · · · ·	/ Internship an	d Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	550	725
	DSC10	Discipline - Specific Core Course	UBCO5001	Cost Accounting I (B.Com, B.Com.CA, B.Com. F & A, BBA)	5	5	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBCO5002	Management Accounting I (B.Com, B.Com.CA, B.Com. F & A, BBA)	5	4	3	25	75	100

				GRAND TOTAL	180	180	_	1075	3225	4400
		Jourse		MOOC <sup>®</sup> TOTAL	30	55	-	225	675	900
	VBC6	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay -	-	1	-	-	-	-
	SEC4	Skill Enhancement Course	UBEXAC61	Extension Activities 40 <sup>a</sup> hrs	-	-	-	25	75	100
	li V	Internship	UBCOPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
		01/3)	UBCOSE63	Trading						
		Coult (To the ose 1 out	UBCOSE62	Employability skills     Stock and Securities						
	SEE2	Skill Enhancement Elective	UBCOSE61	(B.Com, B.Com.CA, B.Com, F&A, BBA)	2	1	3	25	75	100
		- 1	ISCODE63	Export Management     E-Commerce						
I	DSE2	Specific Elective (To choose 1 out of 3)	IBCUDE62	Corporate Social     Responsibility and     Sustainability Reporting	5	4	3	25	75	100
-		Course Discipline-	UBC DE61	Digital Financial Services						
	DSC19	Discipline - Specific Core	UBCO600	Ractical Auditing	4	3	6	25	75	100
	DSC18	Discipline - Specific Core Course	UBCO6004	Entre, ene rial Development (F.C. m om.CA, B.Com. F&A, B.C.)	4	3	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBCO6003	Income Ta Lav & Fractice II	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBCO6002	Management Accounting (B.Com, B.Com.CA L.Com F.A. A, BBA)	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBCO6001	Cost Accounting II (B.Com, B.Com.CA, B.Com. 5 & A, BBA)	3/	5	3	25	75	100
		Disability		TOTAL	3	25	-	175	525	700
	INT1	Apprenticeship /	Internship and F	Report 30 hrs per Semester	7		-	-	-	-
		Course (To choose 1 out of 3)	UBCOSE53	Personality and Career     Development		7			73	100
	SEE1	Enhancement Elective	UBCOSE52	2. Digital Marketing	2	1	-		75	100
		Skill	UBCOSE51	Commerce Practical - Lab				7		
		choose 1 out of 3)	UBCODE53	3. Personal Finance						
	DSE1	Specific Elective (To	UBCODE52	Investment Management	5	4	3	25	1	100
	D3C14	Specific Core Course Discipline-	UBCODE51	Financial Management  1. Business Environment	4	3	3	23	75	
	DSC14	Course Discipline -	UBCO5005	(B.Com, B.Com.CA, B.Com. F&A, BBA)	4	2	3	25	75	1.4
•	DSC13	Discipline - Specific Core	UBCO5004	Human Resource Management	4	4	3	25	75	100
	DSC12	Discipline - Specific Core Course	UBCO5003	Income Tax Law & Practice I	5	4	3	25	75	100

The 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40<sup>α</sup> hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*GSWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	4	18	100	400
Ability Enhancement Course (AEC)	2	2	100	
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	3	9	100	300
Other Elective Course – Allied (OEC)	9	28	100	900
Discipline - Specific Core Course (DSC)	19	78	100	1900
Discipline-Specific Elective (DSE)	2	08/	100	200
Skill Enhancement Elective Course (SEE)	2	7	100	200
Apprenticeship/Internship		30	100	100
Total	5	180		4400

### PROGRAMME FECIFIC OUTCOMES for B.COM.

- PSO1 Prepare Accounts to evaluate business/organization/corporate firms & their operations and assist in Business Decision Vicking for increasing profitability, decreasing costs, selecting from various alternatives and Respiring the statements, using computers & Software effectively.
- PSO2 Develop Er rep eneurial intent, skills, and abilities and make students capable of Communicating, Organising, Managing Business operations, especially Accounting and Finances, Human Resources, and Marketing. Use computers for creating documents, spreadsheets and presentations
- PSO3 Lerstand the principles and techniques of Business Domains such as Accounting, Auditing, Marketing, Banking & Financial Institutions in traditional and digital domains. Utilize Statistical tools for atta collection, presentation & analysis and make decisions accordingly
- Understand and Apply the principles and techniques of effective communication in various domains of business, drafting necessary communications in the daily operations of a Business
- PSO5 Understand various Acts & Legal Provisions with regard to/governing the operation of Businesses, and Companies and comprehend the Indirect Taxes levied in India. Appreciate the need for Corporate Social Responsibility, Sustainability reporting and understand the process and legalities related to it.

- **PSO6** Understand the concepts of Income Tax and use it to compute Income Tax payable by Individuals and Firms, allowing for further Tax Planning, Management & Filing of returns.
- **PSO7** Understand different service firms. Fill up and Process different forms related to Banking, Insurance, Office Communication, Cost Accounting, Income Tax and GST
- PSO8 Plan, Appraise, Execute and Manage a well-determined Project for the effective completion of planned activities. Develop self and hone necessary Entrepreneurship Skills, Employability skills, Team working Attitude and inculcate ethics in personal and professional walks of life.

## MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

PO2	PO3	PO4	PO5	PO6	P07	P08	PO9	PO10
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#### MAPPING CORRELATION BENCHMARK

	Marring	1-30%	31-60%	61-70%	71-100%
	Ma ches	1-24	25-50	51-56	57-80
	relation	Poor	Moderate	High	Very High
	<b>)</b> //				
QY I					
24/					

# COURSE STRUCTURE FOR B.Com. [COMPUTER APPLICATIONS] PROGRAMME (For the candidates admitted from the academic year 2022-2023)

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	OTAL
			UBFUR101	Urdu I						
	GE1	Generic Elective (To choose 1	UBFAR101	Arabic I	6	5	3	25 *	4	100
	GEI	out of 4)	UBFHD101	Hindi I	] "		3	25		100
			UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education *	2	1		25	75	100
I	DSC1	Discipline - Specific Core Course	UBCA1001	Financial Accounting I (B.Com, B.Com.CA, B.Com. F& A, BBA)	1	8	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB102	Professional Communication for Commerce and Management**	3	3	3	25	75	100
	OEC1	Other Elective Course	UBCAAL11	Allied - Information Technology for Suspens (Theory)	7	5	3	25	75	100
	VBC1	Value-Based Course (To choose 1 out of	UBVBC101 UBVBC102	1. Moral I ducation#  2. Physical Education –	1	1	1		25	25
		2)[Online Exam]		Class	30	25	-	150	475	625
			UBFUR2	Ireiu II						
	GE3	Generic Elective (To choose 1	UBFAR201	Arabic II	6	5	3	25	75	100
	GES	out of 4)	UNF/1030/	Hindi II	] "		3	25	73	100
			'BFT/4201	Tamil II						
	GE4	Generic Election	UBFEN201	English II	4	4	3	25	75	100
	AEC2	Ability Enhancement Course	UBENV201	Environmental Studies*	2	1	3	25	75	100
II	DSC2	Discipune - Saccific Core Course	UBCA2001	Financial Accounting II (B.Com, B.Com.CA, B.Com. F& A, BBA)	5	4	3	25	75	100
	DS 's	Discipline - Specific Core Course	UBCA2002	Business Management (B.Com, B.Com.CA, B.Com. F& A, BBA)	4	3	3	25	75	100
Q	OEC2	Other Elective Course	UBCAAL21	Allied - Consumer Welfare	4	4	3	25	75	100
	OEC3	Other Elective Course	UBCAAP21	Allied - Information Technology for Business - Lab	4	3	3	25	75	100
	VBC2	Value-Based Course (To	UBVBC201	Physical Education -     Sports I <sup>#</sup>	4	4			25	25
	VBCZ	choose 1 out of 2)[Online Exam]	UBVBC202	2. Health & Wellness <sup>#</sup>	1	1	1	_	23	25
				TOTAL	30	25	-	175	550	725

	DSC4	Discipline - Specific Core Course	UBCA3001	Corporate Accounting I (B.Com, B.Com.CA, B.Com. F&A, BBA)	5	4	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBCA3002	Business Regulatory Framework (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	100
	DSC6	Discipline - Specific Core Course	UBCA3003	Modern Marketing (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	100
		Other Elective	UBCANM31	Indian Constitution						
	OEC4	Courses (To choose 1 out of	UBCANM32	International Business	4	2	3	25	75	100
		3)	UBCANM33	Data Science for Business						
	OEC5	Other Elective Course	UBCAAL31	Allied – Statistics with Computer Application I	5	4	3	5	75	100
	OEC6	Other Elective Course	UBCAAL32	Allied - Business Economics (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	3		25	75	100
I	SEC2	Skill Enhancement Lab Course	UBCASEP3	Data Base Management System - Lab	3	3	3	25	75	100
		Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#						
	VBC3	(To choose 1 out of 2) [Online Exam]	UBVBC302	2. Physical Education Sports II <sup>#</sup>		1	1	-	25	25
				TOTAL	30	25	-	175	550	725
	DSC7	Discipline - Specific Core Course	UBCA4001	Corporate Accounting II (B.Com, F.Com, CA, B.Com, F&A, BCA)	5	4	3	25	75	100
	DSC8	Discipline - Specific Core Course	UBCA4002	Con pan Law Con. Com.CA, B.Com.	4	4	3	25	75	100
	DSC9	Discipline Specific Core	UBCA4003	Modern Banking B. Com, B.Com.CA, B.Com. B.A, BBA)	4	4	3	25	75	100
		Other Elective	UBCANMU	Insurance in Digital Era						
	OEC7	Courses (To choose 1 out of	UL CANM42	Computerized Financial Management	4	2	3	25	75	100
IV		3)	USCANM43	Operations Research with Computer Applications						
	SEC3	Skill Enhancen t Lab urse	UBCASEP4	Spread Sheet Applications - Lab	3	3	3	25	75	100
	OEC8	Other Elective	UBCAAL41	Allied – Statistics with Computer Applications II	5	4	3	25	75	100
	OEC9	1th at Elective Course	UBCAAL42	Allied – Management Informations System	4	3	3	25	75	100
		Value-Based Course	UBVBC401	1. Cyber Security <sup>#</sup>						
3	VB 4	(To choose 1 out of 2) [Online Exam]	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1	-	25	25
K,	INT1		Internship and	Report 30 hrs per Semester	-	-	-	-	-	-
/				TOTAL	30	25	-	175	550	725
	DSC10	Discipline - Specific Core Course	UBCA5001	Cost Accounting I (B.Com, B.Com.CA, B.Com. F&A, BBA)	5	5	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBCA5002	Management Accounting I (B.Com, B.Com.CA, B.Com. F&A, BBA)	5	4	3	25	75	100

				GRAND TOTAL	180	180	-	1075	3225	440
				TOTAL	30	55	-	225	675	900
	VBC5	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@	-	1	-	-	-	-
3	EC 4	Skill Enhancement Course	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	IN T	Internship	UBCAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
			UBCASE63	3. Business Communications - Lab						
	SEE2	The choose 1 out	UBCASE62	Personality Development     Lab	2	1	3	25	75	100
		Ski Enhancement	UBCASE61	1. E-Commerce (B.Com, B.Com.CA, B.Com. F&A, BBA)						
1		of 3)	UBCAPR63	3. Excel Modeling for Business - Lab						
1	DSE2	Discipline-Specific Elective (To choose 1 out	UBCAPR61	Business Management - Lab  2. Visual Basics for Business - Lab	5	4	3	25	75	10
	פוסטט	Core Course	5	1. Web Designing for	4	3	0	25	15	10
	DSC19	Discipline - Specific	UBCA60	Fat, BBA)	4	3	6	25	75	10
	DSC18	Discipline - Specific Core Course	UBCA6004	Entroper suriel  Delication ont  B.Com.CA, B.Com.	4	3	3	25	75	10
	DSC17	Discipline - Specific Core Course	UBCA6003	Compute Applications in Finance (thec.)	5	4	3	25	75	10
	DSC16	Discipline - Specific Core Course	UBCA6002	Management Accounting ( ( B.Com, B.Com.CA, Com. F&A, BBA)	5	4	3	25	75	10
	DSC15	Discipline - Specific Core Course	UBCA6001	Cost Accounting II (B.Com, B.Com.CA, B.Com. F&A, BBA)	5	5	3	25	75	10
				TOTAL	30	25	-	175	525	70
	INT1	Apprenticeship /	Internship and	Report 30 hrs per Semester	1		-	-	-	-
		out of 3)	UBCASE53	3. Employability Skills						
	SEE1	Elective Course (To choose 1	UBCASE52	Quantitatives     Techniques	2	1	3	25	75	10
		Skill Enhancement	UBCASE51	Basic Numerical Skills			1		•	
		out of 3)	UBCADE53	3. Services Marketing						
		Specific Elective (To choose 1	UBCADE52	Customer Relationship     Management	5	4	3	25	9/	10
	DSE1	Discipline-	UBCADE51	Auditing with Digital     Tools					1	
	DSC14	Discipline - Specific Core Course	UBCAPR51	Enterprise Resource Planning Software - Lab	4	3	3	25	75	
,	DSC13	Discipline - Specific Core Course	UBCA5004	Human Resource Management I (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	10
	DSC12	Discipline - Specific Core Course	UBCA5003	Enterprise Resource Planning (Theory)	5	4	3	25	75	10

The 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40<sup>a</sup> hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, #Handled by the Allied Department, ®SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	4	18	100	400
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	1.0
Skill Enhancement Course (SEC)	3	9	100	20)
Other Elective Course – Allied (OEC)	9	28	100	900
Discipline - Specific Core Course (DSC)	19	78	100	1900
Discipline-Specific Elective (DSE)	2	8	100	200
Skill Enhancement Elective Course (SEE)	2	04/	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

### PROGRAMME SPECIFIC OUTCOMES (PSOs):

#### By the end of the Programme, the Students vill be able to

**PSO1:** Understand the principles of Corpornication, Business Management and be able to apply them in business contexts.

**PSO2:** Prepare Accounts of Various types of business entities in digital format.

**PSO3:** Draft proforma of Visious Statements and Reports of Joint Stock Companies, Banking Companies using emputer applications.

**PSO4:** Collect, Table e, Analyse and interpret data using Statistical Tools and Software.

**PSO5:** Create and Manage databases for different types of organisations.

PSO6: Conduct Visiness by adhering to various Legal and Regulatory Guidelines in the digital era.

PSO7: Exhibit Entrepreneurship Skills.

**PSO8:** Apply Optimal Costing Methods for better decision-making.

Apply Income Tax Provision to estimate the Tax Liability of Individuals and MSMEs.

**10**: Perform Business Activities efficiently and effectively in the digital Era with the help of ICT.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program				Р	rogram (	Outcome	s (POs)			
Specific Outcomes PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>	✓	✓	<b>✓</b>
PSO2	✓	✓	✓	✓		✓			✓	
PSO3	✓	✓		✓		✓				
PSO4	✓	✓		✓		✓	✓		<b>√</b>	
PSO5	✓	✓	✓	✓		✓			N	
PSO6	✓	✓						✓		<b>✓</b>
PSO7	✓	✓	✓	✓	✓	✓	✓	<b>√</b>		✓
PSO8	✓			✓		✓	✓	<b>V</b>		
PSO9	✓	✓	✓	✓		✓		<b>√</b>	7	
PSO10	✓	✓	✓	✓	✓	✓	<b>√</b>		✓	
Number of Ma	tches = 64	4, Correla	ation: Hi	gh	•	•			•	

# MAPPING BENCH MIR

	Mapping	1-30%	31-60 6	61-70%	71-100%
	Matches	1-30	21-63	61-70	71-100
	Correlation	Poor	mportate	High	Very High
REPLA					

#### **B.Com. FINANCE & ACCOUNTS** (For the candidates from the academic year 2022-2023) Exam. Hrs. Hrs./Week Semester Course Credit Part CIA **Course Title** Category Code UBFUR101 Urdu I Generic UBFAR101 Arabic I Elective GE1 6 5 3 (To choose 1 UBFHD101 Hindi I out of 4) UBFTA101 Tamil I Generic 4 GE<sub>2</sub> UBFEN101 English I 4 75 100 Elective Ability 25 AEC1 Enhancement UBVED101 Value Education \* 2 75 100 I Course Discipline Financial Accounting I DSC<sub>1</sub> Specific Core **UBFA1001** (B.Com, B.Com.CA, B.Com. 3 25 75 100 F&A, BBA) Course Skill Professional Communicat Enhancement SEC1 UBSKB102 for Commerce and 3 25 3 75 100 Course Management\*\* Other Elective OEC1 UBFAAL11 Allied - Indian E 7 5 25 75 100 3 Course Value-Based UBVBC101 1. Moral Edu VBC1 Course 1 25 (To choose 1 1 1 25 UBVBC102 out of 2) [Online Exam] 150 30 25 475 625 UBFUR201 Jrdu II Generic Arabic II UBFAR 11 Elective GE3 6 5 3 25 75 100 (To choose 1 Hindi II out of 4) Tamil II Generic FEN201 English II GE4 4 4 3 25 75 100 Elective Ability UBENV201 Environmental Studies \* AEC2 2 1 3 25 75 100 Ш UBFA2001 Financial Accounting II DSC<sub>2</sub> 5 4 3 25 100 Core 75 Business Management Discipline **UBFA2002** DSC Specific Core (B.Com, B.Com.CA, B.Com. 3 25 75 100 4 3 Course F&A, BBA) Allied - Goods and Services Other Elective UBFAAL21 4 4 3 25 75 100 Course Other Elective UBFAAL22 Allied - Financial Markets OEC3 4 3 3 25 75 100 Course Value-Based 1. Physical Education -UBVBC201 Course Sports I# VBC2 (To choose 1 1 1 1 25 25 of out 2) 2. Health & Wellness# UBVBC202 [Online Exam] **TOTAL** 30 25 175 550 725

DSC4	Discipline - Specific Core Course	UBFA3001	Corporate Accounting I	5	4	3	25	75	100
DSC5	Discipline - Specific Core Course	UBFA3002	Business Regulatory Framework (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	100
DSC6	Discipline - Specific Core Course	UBFA3003	Modern Marketing (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	100
	Other Elective	UBFANM31	Insurance and Risk Management					(	
OEC4	choose 1 out	UBFANM32	Business Ethics	4	2	3	25	75	100
	of 3)	UBFANM33	Financial Services						
OEC5	Other Elective Course	UBFAAL31	Allied - Business Statistics I	5	4	3	25	75	100
OEC6	Other Elective Course	UBFAAL32	Allied – Business Economics (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	3		5	75	100
SEC2	Skill Enhancement Course	UBFASE31	Financial Management	3	*	3	25	75	100
VDC2	Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC <sup>#</sup>		1	_		0.5	05
VBC3	out of 2) [Online Exam]	UBVBC302	2. Physical Education - Sports II*		1	1	-	25	25
			TOTAL	30	25	-	175	550	725
DSC7	Discipline - Specific Core Course	UBFA4001	Corporate Accounting II	5	4	3	25	75	100
DSC8	Discipline - Specific Core Course	UBFA4002	Compaint I W (B. cor. B. Com.CA, B.Com. &A, SBA)	5	4	3	25	75	100
DSC9	Discipline Specific Core	UBFA4003	B.Com.CA, B.Com. F&A, BBA)	4	4	3	25	75	100
OEC7	Other Elective Courses (To choose 1 out of 3)	UBFANM42 UBFANM42 UBFANM43	Perations Research Personal Finance & Planning Public Finance	4	2	3	25	75	100
SEC3	Skill Enhancement	IBBCSE41	Computer Applications in Business	3	3	3	25	75	100
OEC8	Otherctive	UBFAAL41	Allied – Business Statistics II	5	4	3	25	75	100
OEC9	Course Elective	UBFAAL42	Allied – Business Research Methodology	3	3	3	25	75	100
	ue-Based	UBVBC401	1. Cyber Security#						
VBC4	(To choose 1 out of 2)	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1	-	25	25
INT1		Internship and	Report 30 hrs per Semester	-	-	-	-	-	-
			TOTAL	30	25	-	175	550	725
DSC10	Discipline Specific Core Course	UBFA5001	Cost Accounting I	5	5	3	25	75	100
DSC11	Discipline Specific Core Course	UBFA5002	Management Accounting I	5	4	3	25	75	100
	DSC5 DSC6 OEC4 OEC5 OEC6 SEC2 VBC3 DSC7 DSC8 DSC9 OEC7 SEC3 OEC8 OEC9 VBC4	DSC4 Specific Core Course  Discipline - Specific Core Course  Discipline - Specific Core Course  Discipline - Specific Core Course  OEC4 Other Elective Courses (To choose 1 out of 3)  OEC5 Other Elective Course  OEC6 Other Elective Course  Value-Based Course  Value-Based Course  Value-Based Course  (To choose 1 out of 2) [Online Exam]  DSC7 Specific Core Course  DSC9 Discipline - Specific Core Course  OEC7 Other Elective Core Course  DSC9 Discipline Specific Core  Course  OEC7 Other Elective Course (To choose 1 out of 3)  SEC3 Skill Enhancement Course  OEC8 Other Elective Course (To choose 1 out of 3)  SEC3 Enhancement Course  OEC9 Other Elective Course  OEC9 Other	DSC4 Specific Core Course  Discipline - Specific Core Course  DSC6 Discipline - Specific Core Course  OEC4 Other Elective Course (Tochoose 1 out of 3)  DEC5 Other Elective Course  OEC6 Other Elective Course  OEC6 Other Elective Course  Value-Based Course  Discipline - Specific Core Course  DSC7 Discipline - Specific Core Course  DSC8 Discipline - Specific Core Course  DSC9 Discipline - Specific Core Course  OEC7 Other Elective Course  OEC7 Other Elective Course  OEC8 Other Elective Course  OEC9 Course (Tochoose 1 out of 3)  Skill SEC3 Enhancement Course (Tochoose 1 out of 3)  DSC4 Discipline - Specific Core Course  OEC7 Other Elective Course (Tochoose 1 out of 3)  DSC6 Other Elective Course  OEC8 Other Dective Course  OEC9 Course (Tochoose 1 out of 2)  [Online Exam]  NT1 Apprenticeship / Internship and  DSC10 Discipline Specific Core UBFA5001  DSC11 Specific Core UBFA5001  DSC11 Specific Core UBFA5002	DSC4   Specific   Core   Course   UBFA3001   Corporate Accounting I   DSC5   Discipline   Specific   Core   Course   Cou	DSC4	DSC4	DSC5	DSC5	DSC5

7/				GRAND TOTAL	180	180	-	1075	3225	4400
<b>Y</b> /				TOTAL	30	55	-	225	675	900
		Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC®	-	1	-	-	-	-
	SEC	Value-Based Course	UBEXAC61	Extension Activities 40 <sup>a</sup> hrs	-	-	-	25	75	100
	INT1	Internation	UBFAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
		out (3)	UBFASE63	3 Logistics Management						
	SEE2	Elective Course (To chaose 1)	UBFASE62	Digital Marketing	2	1	3	25	75	100
		Skill Enhancement	ULFASE61	1. E-Commerce (B.Com, B.Com.CA, B.Com. F&A, BBA)						
VI	DSE2	Elective (To choose 1 out of 3)	UBFAD 62	Organisational Behaviour     Investment Management	5	4	3	25	75	100
		Discipline- Specific	UBFADE61	1. Business Environment						
	DSC19	Discipline - Specific Core Course	UBFAPR61	e- file g of Returns	3	3	3	25	75	100
	DSC18	Discipline - Specific Core Course	UBFA6004	Entreprectou al Levelopment (B.Com, B.C. m.C.A, B.Com. F&A CB.	5	3	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBFA6003	Income Tax Law & Practice II	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBFA6002	Management Accounting	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBFA6001	Cost Accounting II	5	7	3	25	75	100
				TOTAL	30	24	/	175	525	700
	INT1	Apprenticeship / I	nternship and Re	port 30 hrs per Semester	-	-	Y		-	-
		(To choose 1 out of 3)	UBFASE53	Training and     Development						
	SEE1	Elective Course	UBFASE52	2. Project Management	2	1	3	15	5	100
		Skill Enhancement	UBFASE51	Office Management						
		(To choose 1 out of 3)	UBFADE53	3 Practical Auditing	1				1	
	DSE1	Specific Elective	UBFADE52	Financial Reporting and     Analysis	5	4	3	25	75	20
/	DSC14	Specific Core Course Discipline-	UBFAPR51 UBFADE51	Tally  1. International Finance	3	3	3	25	75	100
	DSC13	Specific Core Course Discipline -	UBFA5004	Management ( B.Com, B.Com.CA, B.Com. F&A, BBA)  Computerised Accounting -	5	4	3	25	75	100
		Course Discipline -		Human Resource		_	_			
	DSC12	Discipline Specific Core	UBFA5003	Income Tax Law & Practice I	5	4	3	25	75	100

The 90\*\* hours of Apprenticeship/Internship/Project and 40° hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*GSWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF	TOTAL	MARKS	TOTAL
COURSES	COURSES	CREDITS		MARKS
Generic Elective - Language & English (GE)	4	18	100	400
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	3	9	100	300
Other Elective Course – Allied (OEC)	9	28	100	9
Discipline - Specific Core Course (DSC)	19	78	100	1900
Discipline-Specific Elective (DSE)	2	8	1 5	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	8		4400

#### **PSO: Program-Specific Outcome**

## By the end of the Programme, the Students will be able to

- **PSO1** Acquire the knowledge of principles o
- **PSO2** Understand the various accounting achniques and methods to adopt and practice these skills in various fields.
- **PSO3** Develop comprehension was in the area of tax, and finance to become an expert, consultant for business tirms.
- PSO4 Provide solutions of various economic issues in the field of agriculture, Industries, and other allied sees s
- PSO5 Understand he statistical methods and techniques to solve various problems relating to another interdisciplinary arena including research
- **PSO6** Frovide more exposure to modern aspects of the HR and Marketing field to develop decision-making skills.
- **PSO7** Entrepreneurial exposure to become young entrepreneurs and corporate professionals.
- Equip with knowledge of legal framework in the context of the business, company, and various industries.
- **YSO9** Understand the importance of communication, and writing necessary reports in the daily routine of business.
- **PSO10** Computer applications and computerized accounting like e-filing and different tax return training will enable them to solve accounting problems.

# MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program				Pro	gram Ou	t Comes	(POs)			
Specific Outcomes PSOs	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	٧	1	1	1		1	1		-	
PSO2	1	1	1	1	1	1	√ √			1
PSO3	1	1	1	1	1	1	1			
PSO4	1	1	1	1	1	1	1			1
PSO5	1	1	1	1	1	1	1			1
PSO6	1	1	1	1		1	0			1
PSO7	1	1	1	1	1	1		1		1
PSO8	1	1	1	1	1			1		1
PSO9	1	1	1	1		V		1	1	1
PSO10	1	1	1	1	1	V			1	1

### ya ping Bench Mark

Mapping	1-30	31-60%	61-70%	71-100%
Matches	-3	31-60	61-70	71-100
Correlation	Pour	Moderate	High	Very High
		1	1	-
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#### PROGRAMME OUTCOMES FOR B.Sc. PROGRAMMES

- PO1 Communicate in English, the ideas, findings, and results effectively through Conversations, meetings, and reports, especially through digital means develop linguistic skills in one Indian/Regional language.
- **PO2** Demonstrate knowledge of the concepts, principles, theories, and techniques of the domain and allied subject areas.
- **PO3** Synergise knowledge with Analytical& Experimental skills to systematically create & run programs/carry out experiments/formulate & prove theories to enrich the body of knowledge.
- **PO4** Synthesize learned knowledge and acquired skills to Identify and critically analyze pertinent problems in the relevant discipline using appropriate tools and techniques.
- **PO5** Exhibit potential to accomplish tasks independently or as a member or leader of a team.
- **PO6** Utilize specialized instruments and equipment, Computers, Software, Internet, and other ICT tools to carry out experiments.
- PO7 Demonstrate knowledge and scientific understanding to design experiments, use appropriate methodologies, analyze and interpret data and provide solutions, and Exhibit organizational skills, and the ability to manage time and resources.
- PO8 Create Compounds/Products/Software or Design experiments and/or collaborate to help Society in building a Sustainable Environment.
- **PO9** Discover a passion for Lifelong Learning through MOOCs, ODL, and Self Learning techniques through optimum use of ICT.
- PO10 Identify and assess various issues in Environment and suggest measures to overcome them. Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future.

#### COURSE STRUCTURE FOR B.Sc. MATHEMATICS PROGRAMME (For the candidates admitted from the academic year 2022-2023) Hrs. Hrs./Week Semester Credit **IOTAL** ESE Part Course S Exam. Category **Course Title** Code UBFUR101 Urdu I Generic UBFAR101 Arabic I Elective GE1 5 6 3 25 75 100 (To choose 1 UBFHD101 Hindi I out of 4) UBFTA101 Tamil I Generic GE2 UBFEN101 English I 4 100 4 3 25 75 Elective Ability AEC1 Enhancement UBVED101 Value Education \* 3 25 75 100 2 1 Course Discipline -DSC<sub>1</sub> Specific Core UBMS1001 Algebra & Calculus 3 3 3 25 75 100 Course Discipline Mathematical Computations ı Specific Core 3 Practical Skill Professional Communication for SEC1 Enhancement UBSKB103 3 3 3 25 75 100 Physical Sciences\*\* Course 1. Allied - Numerical Other Elective UBMSAL11 Approximations -I 5 5 3 25 75 100 Course UBMSAL12 OEC1 2. Allied - Physics - I 1. Allied Practical - Numerical UBMSAP11 Other Elective Computations - Lab 3 Course UBMSAP12 2. Allied Practical - Physics VBC1 Value-Based UBVBC101 1. Moral Education# Course (To choose 1 25 1 1 1 25 UBVBC102 Physical Education – Yoga\* out of 2) [Online Exam] TOTAL 30 22 150 475 625 -UBFUR201 Urdu II Generic UBFAR201 Arabic II Elective GE3 6 5 3 25 75 100 (To choose 1 UBFHD201 Hindi II out of 4) UBFTA201 Tamil II Generic 3 100 GE4 UBFEN201 English II 4 4 25 75 Elective Ability Ш AEC2 Enhancement UBENV201 Environmental Studies \* 2 1 3 25 75 100 Course Discipline -DSC<sub>2</sub> Specific Core UBMS2001 Geometry & Trigonometry 6 6 3 25 75 100 Course Discipline -Mathematical Computations -DSC3 UBMSPR21 3 3 Specific Core 3 25 75 100 Course 1. Allied - Numerical Other Elective UBMSAL21 OEC2 Approximations - II 5 5 3 25 75 100 Course 2. Allied - Physics-II UBMSAL22 1. Allied Practical - Numerical UBMSAP21 Other Elective OEC3 Computations - Lab 3 3 3 25 75 100 Course UBMSAP22 2. Allied Practical - Physics Value-Based UBVBC201 1. Physical Education - I# Course VBC2 25 (To choose 1 1 1 1 25 UBVBC202 2. Health & Wellness# out of 2) [Online Exam] TOTAL 30 28 175 550 725

			UBFUR301	Urdu III						
		Generic	UBFAR301	Arabic III	1					
	GE5	Elective (To choose 1	UBFHD301	Hindi III	4	4	3	25	75	100
		out of 4)	UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Oil El i	UBURNM31	Basic Urdu I						
	0504	Other Elective Course	UBARNM31	Basic Arabic I	2	1	3	25	75	100
III	OEC4	(To choose 1 out of 4)	UBHDNM31	Basic Hindi I		'	3	25	/5	100
		out of 4)	UBTANM31	Ithazhiyal I						
	DSC4	Discipline - Specific Core Course	UBMS3001	Vector Analysis & Ordinary Differential Equations	5	4	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBMS3002	Fourier Series & Partial Differential Equations	4	3	3	25	75	100
	OEC5	Other Elective Course	UBMSAL31	Allied - Statistics	5	4	3	25	75	100
	OEC6	Other Elective Course	UBMSAP31	Allied Practical - Statistics I	3	3	3	25	75	100
		Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC*						
	VBC3	(To choose 1 out of 2)	UBVBC302	2. Physical Education Sports - II <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	175	550	725
		Generic	UBFUR401	Urdu IV						
	GE7	Elective	UBFAR401	Arabic IV	4	4	3	25	75	100
		(To choose 1 out of 4)	UBFHD401	Hindi IV	-					
		Generic	UBFTA401	Tamil IV		_				
	GE8	Elective	UBFEN401	English IV	6	5	3	25	75	100
		Other Elective	UBURNM41	Basic Urdu II						
	OEC7	Course (To choose 1	UBARNM41 UBHDNM41	Basic Arabic II	2	1	3	25	75	100
		out of 4)	UBTANM41	Basic Hindi II Ithazhiyal II						
		Discipline -	UDI ANIVI4 I	iuiaziiiyai ii						
IV	DSC6	Specific Core Course	UBMS4001	Integral Transforms	5	4	3	25	75	100
	DSC7	Discipline - Specific Core Course	UBMS4002	Special Transforms	4	3	3	25	75	100
	OEC8	Other Elective Course	UBMSAL41	Allied - Sampling Techniques	5	4	3	25	75	100
	OEC9	Other Elective Course	UBMSAP41	Allied Practical - Statistics II	3	3	3	25	75	100
		Value-Based Course	UBVBC401	1. Cyber Security <sup>#</sup>						
	VBC4	(To choose 1 out of 2)	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1	-	25	25
	INT1		/ Internship ar	nd Report 30 hrs per Semester	_	_	-	-	-	-
				TOTAL	30	25	-	175	550	725
	DSC8	Discipline - Specific Core Course	UBMS5001	Abstract Algebra	5	4	3	25	75	100
	DSC9	Discipline - Specific Core Course	UBMS5002	Real Analysis I	5	4	3	25	75	100

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	DSC10	Discipline - Specific Core Course	UBMS5003	Complex Analysis I	5	4	3	25	75	100
V	DSC11	Discipline - Specific Core Course	UBMS5004	Mechanics I	4	4	3	25	75	100
	DSC12	Discipline - Specific Core Course	UBMS5005	Mathematical Programing I	4	4	3	25	75	100
		Discipline-	UBMSDE51	1) C++ Practical						
	DSE1	Specific Elective	UBMSDE52	2) Astronomy	5	4	3	25	75	100
	DSET	(To choose 1 out of 3)	UBMSDE53	3) Number Theory	3	4	3	25	75	100
		Skill Enhancement	UBMSSE51	Mathematics for Service     Commission Examinations						
	SEE1	Elective	UBMSSE52	2) Mathematical Modeling	2	1	3	25	75	100
		Course (To choose 1 out of 3)	UBMSSE53	3) Web Designing						
	INT1	•	Internship and	Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC13	Discipline - Specific Core	UBMS6001	Linear Algebra	5	4	3	25	75	100
	DSC14	Course Discipline - Specific Core Course	UBMS6002	Real Analysis II	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBMS6003	Complex Analysis II	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBMS6004	Mechanics II	4	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBMS6005	Mathematical Programming II	4	4	3	25	75	100
		Discipline-	UBMSDE61	1. Graph Theory						
VI	DSE2	Specific Elective	UBMSDE62	2. Fuzzy Mathematics	5	3	3	25	75	100
	DSEZ	(To choose 1 out of 3)	UBMSDE63	3. Actuarial Mathematics	5	3	3	25	/5	100
		Skill	UBMSSP61	1. Mathematical documentation						
	SEE2	Enhancement Elective Course	UBMSSE62	2. R - Programming	2	1	3	25	75	100
		(To choose 1 out of 3)	UBMSSE63	3. Time Series Analysis						
	INT1	Internship	UBMSPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC 2	Skill Enhancement Course	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	VBC5	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC®	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
			1	GRAND TOTAL	180	180			3225	4400

The 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40<sup>α</sup> hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*GSWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC) + MOOC	4+1	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

## PROGRAM SPECIFIC OUTCOMES (PSOS) FOR THE MATHEMATICS PROGRAMME BY THE END OF THE PROGRAM, THE STUDENTS WILL BE ABLE TO

PSO1	Develop the mathematical ability to think abstractly.
PSO2	Solve skilled problems.
PSO3	Create talents for various types of employment.
PSO4	Equip themselves to appear in competitive examinations.
PSO5	Learn independently and improve self-performance.
PSO6	Develop in-depth knowledge of mathematics appreciating the connection between theory and its applications.
PSO7	Identify the application of mathematics in other disciplines and society.
PSO8	Demonstrate mathematical modelling ability.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme	Programme Outcomes											
Specific Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
PSO1	✓	✓	✓	✓			✓	✓		✓		
PSO2	✓	✓	✓	✓			✓	✓	✓			
PSO3	✓		✓	✓	✓		✓	✓				
PSO4	✓	✓		✓	✓			✓	1			
PSO5	✓		✓	✓		✓	✓	✓	✓			
PSO6		✓	✓	✓	✓		✓	✓	✓			
PSO7		✓	✓	✓				✓	✓	✓		
PSO8		<b>✓</b>	✓			✓	✓	✓	<b>1</b>	✓		
Number of Ma	Number of Matches = 53, Correlation: High											

#### MAPPING CORRELATION BENCHMARK

Mapping	1-29%	30-59%	60-69%	70-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### **COURSE STRUCTURE FOR B.Sc. PHYSICS** (For the candidates admitted from the academic year 2022-2023) Hrs./Week Exam. Hrs. Semester Credit TOTAL ESE Part SE Course Category **Course Title** Code UBFUR101 Urdu I Generic Elective UBFAR101 Arabic I GE1 (To choose 1 6 5 3 25 75 100 UBFHD101 Hindi I out of 4) UBFTA101 Tamil I GE2 Generic Elective 3 UBFEN101 English I 4 4 25 75 100 Ability AEC1 Enhancement UBVED101 Value Education\* 2 1 3 25 75 100 Course Discipline -Properties of Matter and DSC<sub>1</sub> Specific Core UBPY1001 3 3 75 100 3 25 Acoustics ı Course Skill **Professional Communication** 3 3 3 75 Enhancement UBSKB103 25 100 for Physical Sciences\*\* Course SEC1 Discipline Specific Core Practical - Physics Practical I 3 Practical OEC1 **UBPYAL11** Allied Chemistry I 5 5 3 25 75 100 Other Elective Course Allied Chemistry Practical 3 \_ \_ Value-Based VBC1 UBVBC101 1. Moral Education# Course (To choose 1 out of 1 1 25 25 1 2. Physical Education -UBVBC102 2)[Online Yoga\* Course] **TOTAL** 30 22 150 475 625 UBFUR201 Urdu II Generic Elective UBFAR201 Arabic II (To choose 1 GE3 6 5 3 25 75 100 UBFHD201 Hindi II out of 4) UBFTA201 Tamil II GE4 Generic Elective UBFEN201 English II 4 4 3 25 75 100 Ability AEC2 2 75 Enhancement UBENV201 Environmental Studies \* 1 3 25 100 Course Discipline -Ш DSC<sub>2</sub> Specific Core UBPY2001 Thermal Physics 6 6 3 25 75 100 Course Discipline - Specific DSC3 UBPYPR21 Practical -Physics Practical I 3 3 3 25 75 100 Core Course Other Elective OEC2 UBPYAL21 Allied Chemistry II 5 5 3 25 75 100 Course Other Elective OEC3 UBPYAP21 3 3 3 Allied Chemistry Practical 25 75 100 Course Value-Based 1. Physical Education -UBVBC201 Course Sports I# VBC2 (To choose 1 out 1 1 1 25 25 of 2) UBVBC202 2. Health & Wellness# [Online Course]

30

28

175

550

725

**TOTAL** 

			LIDELIDOGA	T			I			
		Generic Elective	UBFUR301	Urdu III	1					
	GE5	(To choose 1	UBFAR301	Arabic III	4	4	3	25	75	100
		out of 4)	UBFHD301	Hindi III	_					
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Other Elective	UBURNM31	Basic Urdu I						
	OEC4	Course	UBARNM31	Basic Arabic I	2	1	3	25	75	100
Ш		(To choose 1 out of 4)	UBHDNM31	Basic Hindi I						
		,	UBTANM31	Ithazhiyal I						
	DSC4	Discipline - Specific Core Course	UBPY3001	Classical Mechanics & Relativity	6	4	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBPYPR31	Physics Practical II	3	3	3	25	75	100
	OEC5	Other Elective Course	UBPYAL31	Allied - Mathematics I	5	4	3	25	75	100
	OEC6	Other Elective Course	UBPYAP31	Allied – Mathematics Practical I	3	3	3	25	75	100
		Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#						
	VBC3	(To choose 1 out of 2) [Online Course]	UBVBC302	2. Physical Education - Sports II <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	175	550	725
			UBFUR401	Urdu IV						
		Generic Elective	UBFAR401	Arabic IV	1.			0.5		100
	GE7	(To choose 1 out of 4)	UBFHD401	Hindi IV	4	4	3	25	75	
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
		Other Elective	UBURNM41	Basic Urdu II						
	0507	Course	UBARNM41	Basic Arabic II	]		3	25	75	100
	OEC7	(To choose 1	UBHDNM41	Basic Hindi II	2	1		25	75	
		out of 4)	UBTANM41	Ithazhiyal II						
IV	DSC6	Discipline - Specific Core Course	UBPY4001	Optics and Spectroscopy	6	5	3	25	75	100
	DSC7	Discipline Specific Core Practical	UBPYPR41	Physics Practical III	3	3	3	25	75	100
	OEC8	Other Elective Course	UBPYAL41	Allied - Mathematics II	5	3	3	25	75	100
	OEC9	Other Elective Course	UBPYAP41	Allied – Mathematics Practical II	3	3	3	25	75	100
		Value-Based	UBVBC401	1. Cyber Security <sup>#</sup>						
	VBC4	Course (To choose 1 out of 2) [Online Course]	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1	-	25	25
	INT1		nternship and	Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	550	725
	DSC8	Discipline - Specific Core Course	UBPY5001	Electricity and Electromagnetism	5	4	3	25	75	100
	DSC9	Discipline - Specific Core Course	UBPY5002	Atomic Physics	5	4	3	25	75	100
		•		•	•			1	1	

	DSC10	Discipline - Specific Core Course	UBPY5003	Applied Electronics	5	4	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBPYPR51	Practical – Physics Practical IV	4	4	3	25	75	100
V	DSC12	Discipline - Specific Core Course	UBPYPR52	Practical – Electronics Experiments I	4	4	3	25	75	100
		Discipline-	UBPYDE51	1. Digital Electronics						
	DSE1	Specific Elective (To choose 1	UBPYDE52	2. Power Electronics	5	4	3	25	75	100
		out of 3)	UBPYDE53	3. Materials Science						
		Skill	UBPYSE51	1. Radiation Physics						
	SEE1	Enhancement Elective Course	UBPYSE52	Electrical Circuit Network     Skills	2	1	3	25	75	100
		(To choose 1 out of 3)	UBPYSE53	Renewable Energy and Energy Harvesting						
	INT1	Apprenticeship / In	ternship and Re	eport 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC13	Discipline - Specific Core Course	UBPY6001	Nuclear and Particle Physics	5	4	3	25	75	100
	DSC14	Discipline - Specific Core Course	UBPY6002	Wave Mechanics and Special functions	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBPY6003	Numerical methods and Fundamentals of "C"	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBPYPR61	Practical - Physics Practical V	4	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBPYPR62	Practical -Electronics Experiments II	4	4	3	25	75	100
		Discipline-	UBPYDE61	1. Microprocessor 8085 and 8086		3			75	
VI	DSE2	Specific Elective (To choose 1	UBPYDE62	Microcontroller and its     Applications	5		3	25		100
		out of 3)	UBPYDE63	3. Solid-State Physics						
		Skill	UBPYSE61	1. Astrophysics						
	SEE2	Enhancement Elective Course (To choose 1	UBPYSE62	Digital Television     Maintenance &     Troubleshooting	2	1	3	25	75	100
		out of 3)	UBPYSE63	3. Spectroscopy						
	INT1	Internship	UBPYPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC2	Skill Enhancement Course	UBEXAC61	Extension Activities 40 <sup>a</sup> hrs	-	-	-	25	75	100
	VBC5	Value-Based Course	SWAYAM / C Bombay - MC	Online Spoken Tutorial by IIT	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180	-	107 5	3225	4400

The  $90^{\#}$  hours of Apprenticeship / Internship / Project and  $40^{\alpha}$  hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activity is included in Grand Total but not considered for CGPA.

<sup>\*</sup> Handled by the Department of English

<sup>\*\*</sup> Handled by the Major Department

- **#** Handled by the Allied Department
- © SWAYAM / Online Spoken Tutorial by IIT Bombay MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

#### PROGRAMME SPECIFIC OUTCOMES FOR B.Sc. PHYSICS

#### On the completion of this program, the student will be able to

- PSO1: Explains fundamental principles and concepts in various branches of physics.
- **PSO2**: Use the concepts of physics to analyze and solve physical problems.
- **PSO3:** Coordinate the physics knowledge through observation.
- **PSO4**: Realize, develop an understanding of the impact of physics concepts and carry out independently in a real-life situation.
- **PSO5**: Students will develop proficiency in the acquisition of data using a variety of laboratory instruments and analyse, and interpret using relevant software and computers.
- **PSO6**: By performing experiments in the laboratories and interpreting findings to draw logical conclusions.
- PSO7: Discover new ideas in physics, synthesize critically and communicate in scientific forums.
- **PSO8:** Able to appear for competitive examinations with confidence and pursue continuously learning through MOOC, ODL and various learning platforms.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme		Programme Outcomes (POs)								
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	✓	✓	✓	✓	-	-	✓	✓	-	-
PSO2	-	✓	✓	✓	-	✓	✓	-	✓	-
PSO3	-	✓	✓	✓	-	✓	✓	✓	-	-
PSO4	✓	-	✓	✓	✓	✓	✓	-	✓	-
PSO5	✓	✓	✓	✓	-	✓	✓	✓	✓	-
PSO6	✓	✓	-	✓	-	✓	✓	-	✓	-
PSO7	✓	✓	-	✓	✓	✓	✓	✓	✓	-
PSO8	-	-	✓	✓	-	-	✓	-	✓	-

Number of Matches = 51, Correlation: High

### **MAPPING CORRELATION BENCHMARK**

Mapping	1-29%	30-59%	60-69%	70-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### COURSE STRUCTURE FOR B.Sc. CHEMISTRY (For the candidates admitted from the academic year 2022-2023) Hrs./Week Exam. Hrs. Semester Credit TOTAL Part ESE Course **Course Title** Category Code UBFUR101 Urdu I Generic Elective UBFAR101 Arabic I GE1 (To choose 1 out 6 5 3 25 75 100 UBFHD101 Hindi I of 4) Tamil I UBFTA101 GE2 Generic Elective UBFEN101 English I 4 25 75 100 4 3 Ability AEC1 3 Enhancement UBVED101 Value Education\* 2 1 25 75 100 Course Discipline - Specific DSC<sub>1</sub> UBCH1001 75 General Chemistry I 3 3 3 25 100 Core Course I **Professional Communication** Skill Enhancement SEC1 UBSKB103 **English for Physical** 3 3 3 25 75 100 Course Sciences\*\* Semi micro Analysis of Discipline Specific Simple Salt and Complex 3 Core Practical Preparation Other Elective UBCHAL11 Allied Physics I 5 5 3 25 75 100 OEC1 Course Other Elective Allied Physics Practical 3 Course Value-Based Course 1. Moral Education# VBC1 UBVBC101 (To choose 1 out of 25 1 1 25 1 2. Physical Education -2) [Online Course] UBVBC102 Yoga<sup>#</sup> **TOTAL** 30 22 -150 475 625 UBFUR201 Urdu II Generic Elective UBFAR201 Arabic II 3 GE3 (To choose 1 out of 6 5 25 75 100 UBFHD201 Hindi II UBFTA201 Tamil II UBFEN201 GE4 Generic Elective English II 4 4 3 25 75 100 Ability Enhancement UBENV201 2 3 25 AEC2 Environmental Studies\* 1 75 100 Course Discipline - Specific Ш DSC<sub>2</sub> **UBCH2001** General Chemistry II 6 6 3 25 75 100 Core Course Semi micro Analysis of Discipline - Specific UBCHPR21 DSC3 3 25 75 Inorganic Mixture and 3 3 100 Core Course **Complex Preparation** OEC2 UBCHAL21 Allied Physics II 5 5 25 75 100 Other Elective Course 3 UBCHAP21 Allied Physics Practical OEC3 Other Elective Course 3 3 3 25 75 100 Value-Based Course 1. Physical Education -UBVBC201 (To choose 1 out of Sports I# VBC2 1 1 1 25 25 2) [Online Course] UBVBC202 2. Health & Wellness# **TOTAL** 30 28 175 550 725

			LIDELIDOOA	Hada III							
		Generic Elective	UBFUR301	Urdu III							
	GE5	(To choose 1 out	UBFAR301	Arabic III	4	4	3	25	75	100	
		of 4)	UBFHD301	Hindi III							
		0	UBFTA301	Tamil III				0.5		400	
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100	
		Other Elective	UBURNM31	Basic Urdu I							
	OEC4	Course (To choose 1 out	UBARNM31	Basic Arabic I	2	1	3	25	75	100	
		of 4)	UBHDNM31	Basic Hindi I							
		Discipline - Specific	UBTANM31	Ithazhiyal I							
	DSC4	Core Course Discipline - Specific	UBCH3001	General Chemistry III	6	4	3	25	75	100	
Ш	DSC5	Core Course	UBCHPR31	Volumetric Estimation I	3	3	3	25	75	100	
		Other Elective Course	UBCHAL31	Allied - Mathematics I							
	OEC5	(To choose 1 out of 2)	UBCHAL32	Allied – Zoology I	5	4	3	25	75	100	
	0500	Other Elective Course	UBCHAP31	Allied – Mathematics Practical I			0	0.5	7.5	400	
	OEC6	(To choose 1 out	UBCHAP32	Allied – Zoology Practical I	3	3	3	25	75	100	
		of 2) Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC <sup>#</sup>							
	VBC3	(To choose 1 out of 2) [Online Course]	UBVBC302	2. Physical Education – Sports II <sup>#</sup>	1	1	1	-	25	25	
				TOTAL	30	25	-	175	550	725	
			UBFUR401	Urdu IV					75	100	
	057	Generic Elective	UBFAR401	Arabic IV	4	4		0.5			
	GE7	(To choose 1 out of 4)	UBFHD401	Hindi IV		4	3	25			
			UBFTA401	Tamil IV							
	GE8	Generic Elective	UBFEN401	English IV	6	5					
							Ū	3	25	75	100
1		Other Elective	UBURNM41	Basic Urdu II			3	25	75	100	
	OFC7	Other Elective Course	UBURNM41 UBARNM41	Basic Urdu II Basic Arabic II	2						
	OEC7	Course (To choose 1 out			2	1	3	25 25	75 75	100	
	OEC7	Course (To choose 1 out of 4)	UBARNM41	Basic Arabic II	2						
	OEC7	Course (To choose 1 out of 4)  Discipline - Specific Core Course	UBARNM41 UBHDNM41	Basic Arabic II Basic Hindi II	2						
		Course (To choose 1 out of 4)  Discipline - Specific	UBARNM41 UBHDNM41 UBTANM41	Basic Arabic II Basic Hindi II Ithazhiyal II		1	3	25	75	100	
IV	DSC6	Course (To choose 1 out of 4)  Discipline - Specific Core Course Discipline Specific	UBARNM41 UBHDNM41 UBTANM41 UBCH4001	Basic Arabic II Basic Hindi II Ithazhiyal II General Chemistry IV	6	5 3	3 3	25 25 25	75 75 75	100	
IV	DSC6	Course (To choose 1 out of 4)  Discipline - Specific Core Course Discipline Specific Core Practical	UBARNM41 UBHDNM41 UBTANM41 UBCH4001 UBCHPR41	Basic Arabic II  Basic Hindi II  Ithazhiyal II  General Chemistry IV  Volumetric Estimation II  Allied – Mathematics II  Allied – Zoology II	6	1 5	3	25 25	75 75	100	
IV	DSC6 DSC7 OEC8	Course (To choose 1 out of 4)  Discipline - Specific Core Course Discipline Specific Core Practical Other Elective Course Other Elective	UBARNM41 UBHDNM41 UBTANM41 UBCH4001 UBCHPR41 UBCHAL41	Basic Arabic II  Basic Hindi II  Ithazhiyal II  General Chemistry IV  Volumetric Estimation II  Allied – Mathematics II  Allied – Zoology II  Allied - Mathematics  Practical II	6 3 5	5 3	3 3 3	25 25 25 25	75 75 75 75	100 100 100	
IV	DSC6	Course (To choose 1 out of 4)  Discipline - Specific Core Course  Discipline Specific Core Practical  Other Elective Course  Other Elective Course	UBARNM41 UBHDNM41 UBTANM41 UBCH4001 UBCHPR41 UBCHAL41 UBCHAL42	Basic Arabic II  Basic Hindi II  Ithazhiyal II  General Chemistry IV  Volumetric Estimation II  Allied – Mathematics II  Allied – Zoology II  Allied - Mathematics	6	5 3	3 3	25 25 25	75 75 75	100	
IV	DSC6 DSC7 OEC8	Course (To choose 1 out of 4)  Discipline - Specific Core Course Discipline Specific Core Practical Other Elective Course  Other Elective Course  Value-Based	UBARNM41 UBHDNM41 UBTANM41 UBCH4001 UBCHPR41 UBCHAL41 UBCHAL42 UBCHAP41	Basic Arabic II  Basic Hindi II  Ithazhiyal II  General Chemistry IV  Volumetric Estimation II  Allied – Mathematics II  Allied – Zoology II  Allied - Mathematics  Practical II  Allied – Zoology	6 3 5	5 3	3 3 3	25 25 25 25	75 75 75 75	100 100 100	
IV	DSC6 DSC7 OEC8	Course (To choose 1 out of 4)  Discipline - Specific Core Course  Discipline Specific Core Practical  Other Elective Course  Other Elective Course	UBARNM41 UBHDNM41 UBTANM41 UBCH4001 UBCHPR41 UBCHAL41 UBCHAL42 UBCHAP41 UBCHAP42	Basic Arabic II  Basic Hindi II  Ithazhiyal II  General Chemistry IV  Volumetric Estimation II  Allied – Mathematics II  Allied – Zoology II  Allied - Mathematics  Practical II  Allied – Zoology  Practical II	6 3 5	5 3	3 3 3	25 25 25 25	75 75 75 75	100 100 100	
IV	DSC6 DSC7 OEC8	Course (To choose 1 out of 4)  Discipline - Specific Core Course  Discipline Specific Core Practical  Other Elective Course  Value-Based Course  (To choose 1 out of 2) [Online Course]	UBARNM41 UBHDNM41 UBTANM41 UBCH4001 UBCHPR41 UBCHAL41 UBCHAL42 UBCHAP41 UBCHAP42 UBCHAP42 UBCHAP42 UBCHAP42	Basic Arabic II  Basic Hindi II  Ithazhiyal II  General Chemistry IV  Volumetric Estimation II  Allied – Mathematics II  Allied – Zoology II  Allied – Mathematics  Practical II  Allied – Zoology  Practical II  1. Cyber Security#	6 3 5	1 5 3 3	3 3 3	25 25 25 25	75 75 75 75	100 100 100 100	
IV	DSC6 DSC7 OEC8 OEC9	Course (To choose 1 out of 4)  Discipline - Specific Core Course  Discipline Specific Core Practical  Other Elective Course  Value-Based Course  (To choose 1 out of 2) [Online Course]	UBARNM41 UBHDNM41 UBTANM41 UBCH4001 UBCHPR41 UBCHAL41 UBCHAL42 UBCHAP41 UBCHAP42 UBCHAP42 UBCHAP42 UBCHAP42	Basic Arabic II  Basic Hindi II  Ithazhiyal II  General Chemistry IV  Volumetric Estimation II  Allied – Mathematics II  Allied – Zoology II  Allied – Mathematics  Practical II  Allied – Zoology  Practical II  1. Cyber Security#  2. Entrepreneurship#	6 3 5 3	1 5 3 3	3 3 3	25 25 25 25	75 75 75 75 75	100 100 100 100 25	

		1	1							1
	DSC9	Discipline - Specific Core Course	UBCH5002	Organic Chemistry I	5	4	3	25	75	100
	DSC10	Discipline - Specific Core Course	UBCH5003	Physical Chemistry I	5	4	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBCHPR51	Gravimetric Estimation I - Practical	4	4	3	25	75	100
V	DSC12	Discipline - Specific Core Course	UBCHPR52	Physical Chemistry Practical I	4	4	3	25	75	100
		Discipline-Specific	UBCHDE51	Applied Chemistry I						
	DSE1	Elective	UBCHDE52	2. Industrial Chemistry I	5	4	3	25	75	100
	DOLI	(To choose 1 out of 3)	UBCHDE53	Essential Skill in     Chemistry I		7			75	100
		Skill Enhancement Elective Practical	UBCHSP51	Organic Chemistry     Practical I						
	SEE1	Course (To choose 1 out	UBCHSP52	Analysis of Organic     Compounds -Practical	2	1	3	25	75	100
		of 3)	UBCHSE53	Skill Development in     Chemistry Practical I						
	INT1	Apprenticeship /	Internship and R	eport 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	•	175	525	700
	DSC13	Discipline - Specific Core Course	UBCH6001	Inorganic Chemistry II	5	4	3	25	75	100
	DSC14	Discipline - Specific Core Course	UBCH6002	Organic Chemistry II	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBCH6003	Physical Chemistry II	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBCHPR61	Gravimetric Estimation II - Practical	4	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBCHPR62	Physical Chemistry Practical II	4	4	3	25	75	100
		Discipline-Specific	UBCHDEP6	Applied Chemistry II						
	DSE2	Elective Course (To choose 1 out of	UBCHDE62	2. Industrial Chemistry II	5	3	3	25	75	100
VI		3)	UBCHDE63	Essential Skills in     Chemistry II						
		Skill Enhancement Elective Practical	UBCHSP61	Organic Chemistry     Practical II						
	SEE2	Course (To choose 1 out of	UBCHSP62	Preparation of Organic     Compounds - Practical	2	1	3	25	75	100
		3)	UBCHSE63	Skill Development in     Chemistry Practical II						
	INT1	Internship	UBCHPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC2	Skill Enhancement Course	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	VBC5	Value-Based Course	SWAYAM / Or Bombay - MO	nline Spoken Tutorial by IIT OC®	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180	-	1075	3225	4400

The  $90^{\#}$  hours of Apprenticeship / Internship / Project and  $40^{\alpha}$  hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activity is included in Grand Total but not considered for CGPA.

- \* Handled by the Department of English
- \*\* Handled by the Major Department
- # Handled by the Allied Department
- © SWAYAM / Online Spoken Tutorial by IIT Bombay MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

### PROGRAMME-SPECIFIC OUTCOMES (PSO)

### ON COMPLETION OF THE B.SC CHEMISTRY PROGRAMME, THE STUDENTS WILL BE ABLE TO:

PSO1	Utilize his knowledge and interest after studying chemistry as a discipline by summarizing the basic facts and concepts learnt from theory and practical work.
PSO2	Apply principles, theories and techniques of the core subjects to another discipline.
PSO3	Apply the recent developments in chemistry to the welfare of nature and society.
PSO4	Get job opportunities as a chemist by his understanding of industrial process development and its applications.
PSO5	Pursue his higher education in various interdisciplinary subjects connected with technology and research.
PSO6	Handle chemicals, apparatus and instruments with proper analytical tools.
PSO7	Solve the problems arising out of industrial production and environmental pollution.
PSO8	Explore the knowledge of reactions, processes and their applications as an entrepreneur.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program-	Program Outcomes (POs)										
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	
PSO1	<b>✓</b>	<b>✓</b>	<b>V</b>	<b>V</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	
PSO2	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
PSO3	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>✓</b>	<b>-</b>		<b>✓</b>	
PSO4	<b>√</b>	<b>√</b>	<b>✓</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>√</b>	<b>√</b>			
PSO5	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>-</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	
PSO6	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>~</b>	<b>-</b>	<b>√</b>	<b>✓</b>			
PSO7	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>1</b>	<b>√</b>	<b>√</b>	<b>✓</b>		<b>✓</b>	
PSO8	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>✓</b>	<b>-</b>		<b>-</b>	

#### **MAPPING CORRELATION BENCHMARK**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### COURSE STRUCTURE FOR B.Sc. BIOCHEMISTRY (For the candidates admitted from the academic year 2022-2023) Exam. Hrs. Hrs./Week Semester Credit TOTAL ESE Part Course Category **Course Title** Code UBFUR101 Urdu I Generic Elective UBFAR101 Arabic I GE1 100 (To choose 1 out 6 5 3 25 75 UBFHD101 Hindi I of 4) UBFTA101 Tamil I GE2 UBFEN101 4 Generic Elective English I 4 3 25 75 100 Ability AEC1 Value Education\* UBVED101 100 Enhancement 2 1 3 25 75 Course Discipline -DSC<sub>1</sub> Specific Core UBBI1001 Cytology 3 3 25 75 100 3 I Course Skill Enhancement Professional Communication for SEC1 UBSKB104 3 3 25 100 3 75 Life Sciences\*\* Course Discipline-Quantitative and Qualitative Specific Core 3 **Analysis** Practical Other Elective UBBIAL11 Allied Chemistry I 5 5 3 25 100 75 OEC1 Course Other Elective Allied Chemistry Practical 3 \_ Course Value-Based 1. Moral Education# UBVBC101 VBC1 Course 25 (To choose 1 1 1 1 25 2. Physical Education -UBVBC102 out of 2) Yoga# [Online Course] **TOTAL** 625 30 22 150 475 \_ UBFUR201 Urdu II Generic Elective UBFAR201 Arabic II GE3 (To choose 1 out 6 5 3 25 75 100 UBFHD201 Hindi II of 4) UBFTA201 Tamil II GE4 Generic Elective UBFEN201 English II 4 4 3 25 75 100 Ability UBBIV201 AEC2 Environmental Studies \* 2 Enhancement 1 3 25 75 100 Course Discipline -Ш DSC<sub>2</sub> UBBI2001 Specific Core Biomolecules 6 6 3 25 75 100 Course Discipline -Quantitative and Qualitative DSC3 **UBBIPR21** Specific Core 3 3 3 25 75 100 Analysis Course Other Elective OEC2 UBBIAL21 Allied Chemistry-II 5 5 3 25 75 100 Course Other Elective OEC3 UBBIAP21 Allied Chemistry Practical 3 3 3 25 75 100 Course Value-Based 1. Physical Education -UBVBC201 Course VBC2 (To choose 1 out 25 25 1 1 1 of 2) [Online UBVBC202 2. Health & Wellness# Course] **TOTAL** 30 28 175 550 725

			UBFUR301	Urdu III						
		Generic Elective (To choose 1 out of 4)	UBFAR301	Arabic III		4	3	25	75	100
	GE5		UBFHD301	Hindi III	4					
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
			UBURNM31	Basic Urdu I					75	100
		Other Elective Course	UBARNM31	Basic Arabic I	1					
	OEC4	(To choose 1	UBHDNM31	Basic Hindi I	2	1	3	25		
		out of 4)	UBTANM31	Ithazhiyal I						
III	DSC4	Discipline - Specific Core Course	UBBI3001	Analytical Biochemistry	6	4	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBBIPR31	Volumetric Analysis and Biological Preparations - Practical	3	3	3	25	75	100
	OEC5	Other Elective Course	UBBIAL32	Allied Zoology I	5	4	3	25	75	100
	OEC6	Other Elective Course	UBBIAP32	Allied Zoology Practical I	3	3	3	25	75	100
		Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC <sup>#</sup>	1	1	1	-	25	25
	VBC3	(To choose 1 out of 2) [Online Course]	UBVBC302	2. Physical Education - Sports II <sup>#</sup>						
				TOTAL	30	25	-	175	550	725
	GE7	Generic Elective (To choose 1	UBFUR401	Urdu IV	4	4	3	25	75	
			UBFAR401	Arabic IV						100
		out of 4)	UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
		Other Elective Course	UBURNM41	Basic Urdu II	2 1	1	3	25	75	
	OEC7	(To choose 1	UBARNM41	Basic Arabic II						100
		out of 4)	UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	DSC6	Discipline - Specific Core Course	UBBI4001	Analytical Biochemistry and Bioinformatics	6	5	3	25	75	100
IV	DSC7	Discipline Specific Core Practical	UBBIPR41	Colourimetric Analysis and Preparation of Buffers - Practical	3	3	3	25	75	100
	OEC8	Other Elective Course	UBBIAL42	Allied Zoology II	5	3	3	25	75	100
	OEC9	Other Elective Course	UBBIAP42	Allied Zoology Practical II	3	3	3	25	75	100
		Value-Based Course	UBVBC401	1. Cyber Security <sup>#</sup>						
	VBC4	(To choose 1 out of 2) [Online Course]	UBVBC402	2. Entrepreneurship <sup>#</sup>	1 1		1	-	25	25
	INT1	Apprenticeship /	/ Internship and	Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	550	725
	DSC8	Discipline - Specific Core Course	UBBI5001	Enzymology	5	4	3	25	75	100
	DSC9	Discipline - Specific Core Course	UBBI5002	Genetics and Molecular Biology	5	4	3	25	75	100

		T		1	1					1
	DSC10	Discipline - Specific Core Course	UBBI5003	Human Anatomy and Physiology	5	4	3	25	75	100
V	DSC11	Discipline - Specific Core Course	UBBIPR51	Colorimetric Analysis and Electrophoresis - Practical	4	4	3	25	75	100
-	DSC12	Discipline - Specific Core Course	UBBIPR52	Medical Laboratory Technology Practical I	4	4	3	25	75	100
-		Discipline-	UBBIDE51	Medical Laboratory     Technology						
	DSE1	Specific Elective (To choose 1 out of 3)	UBBIDE52	2. Microbiology	5	4	3	25	75 75	100
			UBBIDE52	3. Stem Cell Biology						
		Skill	UBBISE51	Biotechnology I						
	SEE1	Enhancement Elective Course	UBBISE52	2. Plant Tissue Culture	2	1	3	25		
	OLLI	(To choose 1 out of 3)	UBBISE53	3. Bioinformatics		'	3	23	"	100
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester				-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC13	Discipline - Specific Core Course	UBBI6001	Intermediary Metabolism	5	4	3	25	75	100
-	DSC14	Discipline - Specific Core Course	UBBI6002	Clinical Biochemistry	5	4	3	25	75	100
-	DSC15	Discipline - Specific Core Course	UBBI6003	Immunology	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBBIPR61	Enzymology and Chromatography - practical	4	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBBIPR62	Medical Laboratory Technology Practical II	4	4	3	25	75	100
VI		Discipline- Specific Elective	UBBIDE61	Nutritional Biochemistry     and Dietetics						
	DSE2	(To choose 1 out	UBBIDE62	2. Plant Biochemistry	5	3	3	25	75	100
	SEE2	of 3)  Skill Enhancement Elective Course	UBBIDE63	3. Endocrinology	2	1	3	25	75	100
			UBBISE61	Biotechnology II						
			UBBISE62	2. Animal Cell Culture						
		(To choose 1 out of 3)	UBBISE63	3. Nanobiochemistry						
	INT1	Internship	UBBIPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	VBC5	Value-Based Course	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	VBC6	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC <sup>®</sup>	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180	-	1075	3225	4400

The 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40<sup>α</sup> hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activity is included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	1	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

#### PROGRAMME-SPECIFIC OUTCOMES FOR B.SC. BIOCHEMISTRY

#### ON THE COMPLETION OF THIS PROGRAM THE STUDENT WILL BE ABLE TO

- **PSO1-** Develop effective communication competence (listening, speaking, observing, writing) documentation of experiment work and linguist skills.
- **PSO2-** Understand the fundamental biochemical principles such as structure-function relationship of biomolecules/metabolic pathways with their clinical correlation.
- **PSO3-** Demonstrate an understanding of the principle and have practical experience of the analytical techniques in life science.
- **PSO4-** Analyse biochemical data (eg: enzyme kinetics, molecular structure analysis and biological databases), use of software and ICT tools.
- **PSO5-** Explain the biochemical process that underlines the relationship between phenotype and genotype, structural organization of genetic material, their experience and control.
- **PSO6-** Acquire lifelong self-learning habits through online courses, ability to plan and manage projects to achieve the objectives.
- **PSO7-** Develop ethical and moral values in the profession, environmental and social responsibilities, multi-level commitment to health and well-being.
- **PSO8-** Appreciate and execute their professional roles in society as biochemistry professionals, employers and employees in various industries, researchers and educators.

### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES FOR B.S.c BIOCHEMISTRY

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓		✓				✓		✓	
PSO2		✓							✓	
PSO3			✓	✓	✓	✓	✓		✓	
PSO4				✓	✓	✓	✓		✓	
PSO5		✓	✓						✓	
PSO6									✓	✓
PSO7										✓
PSO8								✓		✓

### **Mapping Correlation Benchmark**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

## COURSE STRUCTURE FOR B.Sc BIOTECHNOLOGY (For the candidates admitted from the academic year 2022-2023)

	(For the candidates admitted from the academic year 2022-2023)											
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL		
			UBFUR101	Urdu I								
		Generic Elective	UBFAR101	Arabic I	•							
	GE1	(To choose 1 out of 4)	UBFHD101	Hindi I	6	5	3	25	75	100		
		1 out of 4)	UBFTA101	Tamil I								
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100		
	AEC1	Ability Enhancement Course	UBVED101	Value Education *	2	1	3	25	75	100		
I	DSC1	Discipline - Specific Core Course	UBBT1001	Cell and Molecular Biology	3	3	3	25	75	100		
	SEC1	Skill Enhancement Course	UBSKB104	Professional Communication for Life Sciences**	3	3	3	25	75	100		
		Discipline-Specific Core Practical		Practical - Cell and Molecular Biology	3	-	-	-	-	-		
	OEC1	Other Elective Course	UBBTAL11	Allied – Fundamentals of Botany	5	5	3	25	75	100		
		Other Elective Course		Allied Practical - Fundamentals of Botany	3	-	-	-	-	-		
	VBC1	Value-Based Course (To choose	UBVBC101	1. Moral Education#								
		1 out of 2) [Online Course]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1	1	1	-	25	25		
				TOTAL	30	22	-	150	475	625		
		Generic Elective (To choose 1 out of 4)	UBFUR201	Urdu II								
	050		UBFAR201	Arabic II	6	5	3	25	75	100		
	GE3		UBFHD201	Hindi II								
		,	UBFTA201	Tamil II								
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100		
	AEC2	Ability Enhancement Course	UBENV201	Environmental Studies *	2	1	3	25	75	100		
	DSC2	Discipline - Specific Core Course	UBBT2001	Microbiology	6	6	3	25	75	100		
II	DSC3	Discipline - Specific Core Course	UBBTPR21	Practical - Cell and Molecular Biology and Microbiology	3	3	3	25	75	100		
	OEC2	Other Elective Course	UBBTAL21	Allied –Ethnobotany	5	5	3	25	75	100		
	OEC3	Other Elective Course	UBBTAP21	Allied - Fundamentals of Botany & Ethnobotany - practical	3	3	3	25	75	100		
	VRC2	Value-Based Course (To choose 1	UBVBC201	1. Physical Education - Sports I <sup>#</sup>	1	1	1	_	25	25		
	IVRC9 I '	out of 2) [Online Course]	UBVBC202	2. Health & Wellness <sup>#</sup>			Ė			2.5		

			LIDELIDO04	I					1	
		Generic Elective	UBFUR301	Urdu III						
	GE5	(To choose 1	UBFAR301	Arabic III	4	4	3	25	75	100
		out of 4)	UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Other Elective	UBURNM31	Basic Urdu I						
	OEC4	Course	UBARNM31	Basic Arabic I	2	1	3	25	75	100
III		(To choose 1 out of 4)	UBHDNM31	Basic Hindi I		-		_0		
		,	UBTANM31	Ithazhiyal I						
	DSC4	Discipline - Specific Core Course	UBBT3001	Immunology	6	4	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBBTPR31	Practical - Immunology	3	3	3	25	75	100
	OEC5	Other Elective Course	UBBTAL31	Allied – Plant Tissue Culture	5	4	3	25	75	100
	OEC6	Other Elective Course	UBBTAP31	Allied - Plant Tissue Culture - practical	3	3	3	25	75	100
	VBC3	Value-Based Course (To choose 1	UBVBC301	1. N.C.C, N.S.S, YRC & RRC <sup>#</sup>	1	1	1		25	25
	VB03	out of 2) [Online Course]	UBVBC302	2. Physical Education - Sports II <sup>#</sup>	•	•	Ľ.	_	23	20
				TOTAL	30	25	-	175	550	725
			UBFUR401	Urdu IV						
	GE7	Generic Elective (To choose 1	UBFAR401	Arabic IV	4	4	3	25	75	100
	02.	out of 4)	UBFHD401	Hindi IV		•		20		100
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
		Other Elective	UBURNM41	Basic Urdu II						
	OEC7	Course	UBARNM41	Basic Arabic II	2	1	3	25	75	100
		(To choose 1 out of 4)	UBHDNM41	Basic Hindi II						
		,	UBTANM41	Ithazhiyal II						
	DSC6	Discipline - Specific Core Course	UBBT4001	Biochemistry and Biophysics	6	5	3	25	75	100
IV	DSC7	Discipline Specific Core Practical	UBBTPR41	Practical - Biochemistry and Biophysics	3	3	3	25	75	100
	OEC8	Other Elective Course	UBBTAL41	Allied - Plant Biotechnology	5	3	3	25	75	100
	OEC9	Other Elective Course	UBBTAP41	Allied - Plant Biotechnology - Practical	3	3	3	25	75	100
		Value-Based Course (To choose 1	UBVBC401	1. Cyber Security#						
	VBC4	out of 2) [Online Course]	UBVBC402	2. Entrepreneurship#	1	1	1	-	25	25
	INT1	Apprenticeship / Intern	ship and Repor	t 30 hrs per Semester	-		_	_	_	-
				TOTAL	30	25	-	175	550	725
	DSC8	Discipline - Specific Core Course	UBBT5001	Genetic Engineering	5	4	3	25	75	100
	DSC9	Discipline - Specific Core Course	UBBT5002	Medical Biotechnology	5	4	3	25	75	100
	DSC10	Discipline - Specific Core Course	UBBT5003	Microbial Biotechnology	5	4	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBBTPR51	Genetic Engineering and Medical Biotechnology - Practical	4	4	3	25	75	100
	DSC12	Discipline - Specific Core Course	UBBTPR52	Microbial Biotechnology - Practical	4	4	3	25	75	100

		Discipline-Specific	UBBTDE51	Medical Lab     Technology						
	DSE1	Elective (To choose 1 out of 3)	UBBTDE52	Fermentation     Technology	5	4	3	25	75	100
		out or 3)	UBBTDE53	3. Endocrinology						
		Skill Enhancement	UBBTSE51	1. Herbal Products						
	SEC2	Course (To choose 1	UBBTSE52	2. Biofertilizers	2	1	3	25	75	100
		out of 3)	UBBTSE53	3. Vermiculture						
	INT1	Apprenticeship / In	ternship and Re	eport 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC13	Discipline - Specific Core Course	UBBT6001	Environmental Biotechnology	5	4	3	25	75	100
	DSC14	Discipline - Specific Core Course	UBBT6002	Aquaculture Biotechnology	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBBT6003	Animal Biotechnology	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBBTPR61	Environmental Biotechnology and Aquaculture Biotechnology - Practical	4	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBBTPR62	Animal Biotechnology - Practical	4	4	3	25	75	100
		Discipline-Specific	UBBTDE61	1.Basic Nanoscience and Technology		3				
VI	DSE2	Elective (To choose 1	UBBTDE62	2.Bioinstumentation	5		3	25	75	100
		out of 3)	UBBTDE63	Biostatistics and     Bioinformatics						
		Skill Enhancement Course	UBBTSE61	Tannery Effluent     Treatment						
	SEC3	(To choose 1	UBBTSE62	2. Spirulina Cultivation	2	1	3	25	75	100
		out of 3)	UBBTSE63	3. Hydroponic Techniques						
	INT1	Internship	UBBTPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	VBC5	Value-Based Course	UBEXAC61	Extension Activities 40 <sup>a</sup> hrs	-	-	-	25	75	100
	VBC6			SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC <sup>®</sup>	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180	_	1075	3225	4400

The 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40<sup>α</sup> hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activity is included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

#### PROGRAMME-SPECIFIC OUTCOMES FOR B.SC BIOTECHNOLOGY:

Upon completion of the B.Sc Biotechnology programme, the students will be able to:

**PSO1:** Acquire sound and solid base in local as well as national languages and on the fundamental principles and the scientific theories related to various spheres of Biotechnology with technological applications.

PSO2: Apply biotechnology skills with global competencies in core and allied fields.

**PSO3:** Integrate technologies through inter-disciplinary concepts and suggest better solutions to solve issues of the underprivileged.

**PSO4:** Utilize ICT for learning and experimenting in pursuance of modern technology and concepts.

**PSO5:** Developing a variety of communication skills such as reading, listening, speaking, etc. helps to express ideas clearly and effectively.

**PSO6**: Conceive the concepts and research approaches to pursue higher studies/attain a higher career in industry, medicine and other relevant fields of biotechnology both locally and nationally and develop their scientific tempo.

**PSO7**: Become entrepreneurs and technologists with strong ethics and technical skills.

**PSO8:** Find out the biosolutions for cross-cutting issues in a global, economic, environmental, and societal context.

# MAPPING OF PROGRAMME SPECIFIC OUTCOMES (B.Sc.)WITH PROGRAMME OUTCOMES

Programme			l	Progran	nme Ou	tcomes	(PO)				
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	
PSO1	$\checkmark$	√	√	√			√				
PSO2	√	√	√		√	√	√	√			
PSO3	$\checkmark$	√	$\checkmark$	$\checkmark$	$\checkmark$	√		√	√	√	
PSO4	$\checkmark$		$\checkmark$		$\checkmark$	√			√		
PSO5	$\checkmark$	√				√			√		
PSO6	$\checkmark$	√	$\checkmark$	$\checkmark$	$\checkmark$	√	√	√	√	√	
PSO7		√	$\checkmark$	$\checkmark$						√	
PSO8	$\checkmark$	√		√	<b>√</b>		√	√		√	
	Number of matches = 51, Correlation : High										

#### **MAPPING CORRELATION BENCHMARK**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### COURSE STRUCTURE FOR B.Sc. COMPUTER SCIENCE

(For the candidates admitted from the academic year 2022-2023)

<u>_</u>										
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
			UBFUR101	Urdu I						
	054	Generic Elective	UBFAR101	Arabic I		_		0.5	7.5	400
	GE1	(To choose 1 out of 4)	UBFHD101	Hindi I	6	5	3	25	75	100
		,	UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education*	2	1	3	25	75	100
	DSC1	Discipline - Specific Core Course	UBCC1001	Digital Logic Fundamentals & Microprocessors	3	3	3	25	75	100
ı	SEC1	Skill Enhancement Course	UBSKB103	Professional Communication for Physical Sciences**	3	3	3	25	75	100
		Discipline-Specific Core Practical	UBCCPR11	Programming in C - Lab	3	-	-	-	-	-
	OEC1	Other Elective Course	UBCCAL11	Allied - Mathematical Foundation I	5	5	3	25	75	100
		Other Elective Course		Allied - Mathematical Foundation - Lab	3	-	-	-	-	-
	VBC1	Value-Based Course (To choose 1	UBVBC101	1. Moral Education#		1	1			
		out of 2)[Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1			-	25	25
				TOTAL	30	22	-	150	475	625
			UBFUR201	Urdu II	30	22	-	150	475	625
	052	Generic Elective	UBFUR201 UBFAR201		_					
	GE3	Generic Elective (To choose 1 out of 4)		Urdu II	<b>30</b>	<b>22</b> 5	3	<b>150</b> 25	<b>475</b> 75	100
	GE3	(To choose 1	UBFAR201	Urdu II Arabic II	_					
	GE3	(To choose 1	UBFAR201 UBFHD201	Urdu II Arabic II Hindi II	_					
		(To choose 1 out of 4)	UBFAR201 UBFHD201 UBFTA201	Urdu II Arabic II Hindi II Tamil II English II Environmental Studies *	6	5	3	25	75	100
	GE4	(To choose 1 out of 4)  Generic Elective Ability Enhancement Course Discipline - Specific Core Course	UBFAR201 UBFHD201 UBFTA201 UBFEN201	Urdu II Arabic II Hindi II Tamil II English II	6	5	3	25	75 75	100
II	GE4 AEC2	(To choose 1 out of 4)  Generic Elective Ability Enhancement Course Discipline - Specific	UBFAR201 UBFHD201 UBFTA201 UBFEN201 UBENV201	Urdu II Arabic II Hindi II Tamil II English II Environmental Studies * Programming in C &	6 4 2	5 4 1	3 3	25 25 25	75 75 75	100
II	GE4 AEC2 DSC2	(To choose 1 out of 4)  Generic Elective Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific	UBFAR201 UBFHD201 UBFTA201 UBFEN201 UBENV201 UBCC2001	Urdu II Arabic II Hindi II Tamil II English II Environmental Studies * Programming in C & Algorithm	6 4 2 6	5 4 1 6	3 3 3	25 25 25 25	75 75 75 75	100 100 100
II	GE4 AEC2 DSC2 DSC3	(To choose 1 out of 4)  Generic Elective Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course Other Elective	UBFAR201 UBFHD201 UBFTA201 UBFEN201 UBENV201 UBCC2001 UBCCPR21	Urdu II Arabic II Hindi II Tamil II English II Environmental Studies * Programming in C & Algorithm Programming in C - Lab Allied - Mathematical	6 4 2 6 3	5 4 1 6	3 3 3 3	25 25 25 25 25	75 75 75 75 75	100 100 100 100
II	GE4 AEC2 DSC2 DSC3 OEC2	(To choose 1 out of 4)  Generic Elective Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course Other Elective Course Course  Other Elective Course Course  Value-Based Course (To choose 1	UBFAR201 UBFHD201 UBFTA201 UBFEN201 UBENV201 UBCC2001 UBCCPR21 UBCCAL21	Urdu II  Arabic II  Hindi II  Tamil II  English II  Environmental Studies *  Programming in C & Algorithm  Programming in C - Lab  Allied - Mathematical Foundation II  Allied - Mathematical Foundation - Lab  1. Physical Education - Sports I#	6 4 2 6 3 4	5 4 1 6 3	3 3 3 3 3	25 25 25 25 25 25	75 75 75 75 75	100 100 100 100 100
II	GE4 AEC2 DSC2 DSC3 OEC2	(To choose 1 out of 4)  Generic Elective Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course Other Elective Course Course Other Elective Course Course  Value-Based Course	UBFAR201 UBFHD201 UBFTA201 UBFEN201 UBENV201 UBCC2001 UBCCPR21 UBCCAL21 UBCCAP21	Urdu II Arabic II Hindi II Tamil II English II Environmental Studies * Programming in C & Algorithm Programming in C - Lab Allied - Mathematical Foundation II Allied - Mathematical Foundation - Lab 1. Physical Education -	6 4 2 6 3 4 4	5 4 1 6 3 5	3 3 3 3 3	25 25 25 25 25 25	75 75 75 75 75 75	100 100 100 100 100

			UBFUR301	Urdu III						
	GE5	Generic Elective (To choose 1	UBFAR301	Arabic III	4	4	3	25	75	100
	GES	out of 4)	UBFHD301	Hindi III	•	-	3	23	75	100
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Oth or Flooting	UBURNM31	Basic Urdu I						
	OEC4	Other Elective Course	UBARNM32	Basic Arabic I	2	1	3	25	75	100
	UEC4	(To choose 1 out of 4)	UBHDNM33	Basic Hindi I	_		3	25	75	100
III		out of 4)	UBTANM33	Ithazhiyal I						
111	DSC4	Discipline - Specific Core Course	UBCC3001	C++ & Data Structures	6	4	3	25	75	100
	DSC6	Discipline - Specific Core Course	UBCCPR31	C++ & Data Structures - Lab	3	3	3	25	75	100
		Other Elective	UBCCAL31	Computer Oriented						
	OEC5	Courses (To choose	OBOOALST	Financial Accounting I	5	4	3	25	75	100
		1 out of 2)	UBCCAL32	Discrete Mathematics						
		Other Elective	UBCCAP31	Computer Oriented Financial Accounting -						
	OEC6	Courses (To	UBCCAPST	Lab I	3	3	3	25	75	100
	OLOG	choose		Discrete Mathematics -	•			20	/5	100
		1 out of 2)	UBCCAP32	Lab						
	VDOO	Value-Based Course (To choose 1	UBVBC301	1. N.C.C, N.S.S, YRC & RRC <sup>#</sup>	4				0.5	0.5
	VBC3	out of 2))[Online Exam]	UBVBC302	2. Physical Education – Sports II <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	175	550	725
			UBFUR401	Urdu IV						
	057	Generic Elective	UBFAR401	Arabic IV	1 .		3	0.5		400
	GE7	(To choose 1 out of 4)	UBFHD401	Hindi IV	4	4		25	75	100
		,	UBFTA401	Tamil IV						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		01 5: ::	UBURNM31	Basic Urdu II						
	0507	Other Elective Course	UBARNM32	Basic Arabic II	1			0.5	75	400
	OEC7	(To choose 1	UBHDNM33	Basic Hindi II	2	1	3	25	75	100
		out of 4)	UBTANM33	Ithazhiyal II	1					
IV	DSC7	Discipline - Specific Core Course	UBCC4001	Programming in Java	6	4	3	25	75	100
	DSC9	Discipline Specific Core Practical	UBCCPR41	Programming in Java - Lab	3	3	3	25	75	100
	OEC8	Other Elective Course (To choose	UBCCAL41	Allied - Computer Oriented Financial Accounting II	5	4	3	25	75	100
		1 out of 2)	UBCCAL42	Operation Research	1					
				Allied Computer						
		Other Elective	UBCCAP41	Oriented Financial						
	OEC9 Other Elective Course (To choose 1 out of 2)		Accounting - Lab II	3	3	3	25	75	100	
		i out of 2)	UBCCAP42	Operation Research - Lab						

		Value-Based Course	UBVBC401	1. Cyber Security <sup>#</sup>						
	VBC4	(To choose 1 out of 2))[Online Exam]	UBVBC402	2. Entrepreneurship <sup>#</sup>	1	1	1			25
	INT1	Apprenticeship / Intern	ship and Repor	t 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	725
	DSC10	Discipline - Specific Core Course	UBCC5001	Machine Learning: Data Mining Using Python	6	5	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBCC5002	Computer Network	6	5	3	25	75	100
	DSC12	Discipline - Specific Core Course	UBCC5003	Operating Systems	5	4	3	25	75	100
V	DSC13	Discipline - Specific Core Course	UBCCPR51	Data Mining using Python Lab	3	3	6	25	75	100
	DSC14	Discipline - Specific Core Course	UBCCPR52	Computer Network Lab	3	3	6	25	75	100
		Disabilita - Caracifia	UBCCDE51	1. Programming in R						
	DSE1	Discipline-Specific Elective (To	UBCCDE52	2. Deep Learning	5	4	3	25	75	100
		choose 1 out of 3)	UBCCDE53	Digital Image     Processing						
		Skill Enhancement Elective Course	UBCCSEP5	Programming in R     Lab						
	SEE1	(To choose 1	UBCCSEP6	2. Deep Learning Lab	2	1	3	25	75	100
		out of 3)	UBCCSE53	3. Cloud Computing						
	INT1	Apprenticeship / Intern	ship and Report	t 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC15	Discipline - Specific Core Course	UBCC6001	Database Management Systems	5	5	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBCC6002	Software Engineering	5	5	3	25	75	100
	SEC5	Skill Enhancement Course	UBCCPJ62	Software Project & Viva Voce	5	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBCCPR61	Database Management Systems - Lab	5	4	3	25	75	100
	DSC18	Discipline - Specific Core Course	UBCCPR62	Mobile Application Development - Lab	4	3		25	75	100
		Discipline-Specific	UBCCDE61	Big Data and     Analytics						
	DSE2	Elective (To choose	UBCCDE62	Open Source     Programming	4	2	3	25	75	100
VI		1 out of 3)	UBCCDE63	Business intelligence and Analytics						
		Skill Enhancement	UBCCSEP7	Big Data and Analytics     Lab						
	SEE2	Elective Course (To choose	UBCCSEP8	Open Source     Programming Lab	2	1	3	25	75	100
		1 out of 3)	UBCCSEP9	Business Intelligence     and Analytics - Lab						
	INT1	Internship	UBCCPJ61	Apprenticeship / Internship & Report 30+30+30= 90 <sup>##</sup>	-	30	3	25	75	100
	SEC5	Skill Enhancement Course	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	VBC5	Value-Based Course	SWAYAM / O Bombay - MO	nline Spoken Tutorial by IIT OC <sup>®</sup>	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180	-	1075	3225	4400

The 90<sup>##</sup> hours of Apprenticeship/Internship/Project and 40<sup>a</sup> hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activity is included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

## PROGRAMME SPECIFIC OUTCOMES (PSOs) for BSc(Computer Science) By the end of the programme, the students will be able to

PSO1	Computational Ability: Implementing fundamentals of computing, computing specialization and domain knowledge suitable for job placement.
PSO2	Problem Analysis: Identity, formulate and analyze complex real-life problems in terms of mathematical modelling and computer science.
PSO3	Design /Development of solutions: Design algorithms for complex, real-world problems through computing systems, components or processes.
PSO4	Investigate Problems: Ability to analyze and investigate complex computing problems through the design of experiments, analysis and interpretation of data.
PSO5	Tool usage: Create, select, modify and apply appropriate technologies and tools to a wide range of computational activities within their limitations
PSO6	Professional ethics: Ability to perform professional practices ethically, keeping in mind cyber regulations & laws.
PSO7	Self-learning: Ability to engage in independent learning for continuous self-development as a computing professional.
PSO8	Communication: Ability to effectively communicate with the technical community
PSO 9	Individual and Teamwork: Ability to work in a hierarchical team both as a member and leader.
PSO 10	Innovation and entrepreneurship: Ability to apply innovative ideas to become an entrepreneur.

### MAPPING OF PROGRAMME SPECIFIC OUTCOMES (B.Sc.) WITH PROGRAMME OUTCOMES

Programme		Programme Outcomes (POs)								
Specific										
Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
(PSOs)										
PSO1	<b>√</b>	✓	✓	✓	✓	<b>√</b>	✓	✓	✓	<b>✓</b>
PSO2	✓	✓	✓	✓						
PSO3		✓	✓	✓			✓	<b>√</b>		
PSO4	<b>✓</b>	✓		✓	✓		✓			
PSO5		✓	✓	✓	✓	✓	✓			<b>✓</b>
PSO6	<b>✓</b>		✓	✓	✓		✓			<b>✓</b>
PSO7	<b>√</b>				✓	<b>√</b>	✓	✓	✓	<b>✓</b>
PSO8	<b>√</b>				✓			✓		<b>✓</b>
PSO9	✓	✓	✓	✓	✓	✓			✓	<b>✓</b>
PSO10	✓	✓			<b>✓</b>			✓	✓	<b>✓</b>

#### **Mapping Correlation Benchmark**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

				TURE FOR B.Sc. DATA SO			2)			
Semester	Part	Category	Course Code	itted from the academic yea	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
			UBFUR101	Urdu I						
	054	Generic Elective	UBFAR101	Arabic I		_		0.5	7.	400
	GE1	(To choose 1 out of 4)	UBFHD101	Hindi I	6	5	3	25	75	100
			UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education* Problems: Ability	2	1	3	25	75	100
	DSC1	Discipline - Specific Core Course	UBDS1001	Problem Solving and Algorithms	3	3	3	25	75	100
I	SEC1	Skill Enhancement Course	UBSKB103	Professional Communication for Physical Sciences**	3	3	3	25	75	100
		Discipline-Specific Core Practical		Programming in C - Lab	3	-	-	-	-	-
	OEC1	Other Elective Course	UBCCAL11	Allied - Mathematical Foundation I	5	5	3	25	75	100
		Other Elective Course		Allied - Mathematical Foundation - Lab	3	-	-	-	-	-
	VBC1	Value-Based Course (To	UBVBC101	1. Moral Education#						
		choose 1 out of 2) [Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	22	-	150	475	625
			UBFUR201	Urdu II						
	GE3	Generic Elective	UBFAR201	Arabic II	6	5	3	25	75	100
	GES	(To choose 1 out of 4)	UBFHD201	Hindi II	] 0	5	3	25	/5	100
			UBFTA201	Tamil II						
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100
	AEC2	Ability Enhancement Course	UBENV201	Environmental Studies *	2	1	3	25	75	100
II	DSC2	Discipline - Specific Core Course	UBCC2001	Programming in C & Algorithm	6	6	3	25	75	100
	DSC3	Discipline - Specific Core Course	UBCCPR21	Programming in C - Lab	3	3	3	25	75	100
	OEC2	Other Elective Course Course	UBCCAL21	Allied - Mathematical Foundation II	4	5	3	25	75	100
	OEC3	Other Elective Course Course	UBCCAP21	Allied - Mathematical Foundation - Lab	4	3	3	25	75	100
	VBC2	Value-Based Course (To choose 1 out of	UBVBC201	Physical Education -     Sports I <sup>#</sup>	1	1	1	-	25	25
		2)[Online Exam]	UBVBC202	2. Health & Wellness <sup>#</sup>						
				TOTAL	30	28	-	175	550	725

			UBFUR301	Urdu III						
	GE5	Generic Elective (To choose 1	UBFAR301	Arabic III	4	4	3	25	75	100
	GES	out of 4)	UBFHD301	Hindi III	4	4	3	25	75	100
		,	UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Oil El i	UBURNM31	Basic Urdu I						
	OEC4	Other Elective Course	UBARNM32	Basic Arabic I	2	_		05	75	400
	OEC4	(To choose 1	UBHDNM33	Basic Hindi I	2	1 4 3 4 3 1 25 4	3	25	75	100
'''		out of 4)	UBTANM33	Ithazhiyal I						
	DSC4	Discipline - Specific Core Course	UBDS3001	Programming in Python	6	4	3	25	75	100
	DSC6	Discipline - Specific Core Course	UBDSPR31	Python - Lab	3	3	3	25	75	100
		Other Elective	UBDSAL31	Allied - Computer Oriented Statistical Method I	_			0.5		400
	OEC5	Course (To choose 1 out of 2)	UBCCAL32	Allied - Discrete	5	4	3	25	75	100
		Other Elective	UBDSAP31	Mathematics Allied – Computer Oriented						
	OEC6	Course (To	UBDSAF31	Statistical Method - Lab I Allied - Discrete	3	3	3	25	75	100
		choose 1 out of 2)	UBCCAP32	Mathematics – Lab						
	VBC3	Value-Based Course <b>(To</b>	UBVBC301	1. N.C.C, N.S.S, YRC & RRC <sup>#</sup>	1	1	1		25	25
	VBC3	choose 1 out of 2)[Online Exam]	UBVBC302	2. Physical Education – Sports II <sup>#</sup>	1	<u>'</u>	Ľ	-	25	25
				TOTAL	30	25	-	175	550	725
			UBFUR401	Urdu IV						
	GE7	Generic Elective (To choose 1	UBFAR401	Arabic IV	4	4	3	25	75	100
	52.	out of 4)	UBFHD401	Hindi IV	4	•				100
			UBFTA401	Tamil IV						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Other Elective	UBURNM31	Basic Urdu II						
	OEC7	Course	UBARNM32	Basic Arabic II	2	1	3	25	75	100
	OLO!	(To choose 1 out of 4)	UBHDNM33	Basic Hindi II	_			25	/3	100
		•	UBTANM33	Ithazhiyal II						
IV	DSC7	Discipline - Specific Core Course	UBDS4001	R Programming	6	4	3	25	75	100
	DSC9	Discipline Specific Core Practical	UBDSPR41	R - Lab	3	3	3	25	75	100
	OEC8	Other Elective Course (To	UBDSAL41	Allied - Computer Oriented Statistical Method II	5	4	3	25	75	100
		choose 1 out of 2)	UBCCAL42	Operation Research						
	OEC9	Other Elective Course (To	UBDSAP41	Allied - Computer Oriented Statistical Methods - Lab II	3	3	3	25	75	100
		choose 1 out of 2)	UBCCAP42	Operation Research - Lab						<u> </u>
	VBC4	Value-Based Course <b>(To</b>	UBVBC401	1. Cyber Security#	1	1	1	_	25	25
		choose 1 out of 2)	UBVBC402	2. Entrepreneurship#						
	INT1	Apprenticeship / Inter	rnship and Repo	ort 30 hrs per Semester	-	-	-	-	-	-
		Dissiplies Constit		TOTAL Machine Learnings Date	30	25	-	175	550	725
	DSC10	Discipline - Specific Core Course Discipline - Specific	UBCC5001	Machine Learning: Data Mining Using Python Data Visualization	6	5	3	25	75	100
	DSC11	Core Course	UBDS5002	Techniques	6	5	3	25	75	100

	DCC42	Discipline - Specific	LIDDOFOOO	Data Warehousing and Data	T			05	7.5	400
	DSC12	Core Course	UBDS5003	Mining	5	4	3	25	75	100
	DSC13	Discipline - Specific Core Course	UBDSPR51	Machine Learning: Data Mining using Python Lab	3	3	6	25	75	100
	DSC14	Discipline - Specific Core Course	UBDSPR52	Data Visualization Techniques - Lab	3	3	6	25	75	100
		Discipline-Specific	UBDSDE51	1. R for Data Science						
	DSE1	Elective (To	UBCCDE52	2. Deep Learning	5	4	3	25	75	100
V		choose 1 out of 3)	UBCCDE53	3 Digital Image Processing						
		Skill Enhancement	UBDSSE51	1. R for Data Science Lab						
	SEE1	Elective Course (To choose 1 out	UBCCSE52	2. Deep Learning Lab	2	1	3	25	75	100
		of 3)	UBCCSE53	3. Cloud Computing						
	INT1	Apprenticeship / Inter	rnship and Repo	ort 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC15	Discipline - Specific Core Course	UBCC6001	Database Management Systems	5	5	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBDS6002	Data Wrangling	5	5	3	25	75	100
	SEC5	Skill Enhancement Course	UBDSPJ62	Software Project & Viva Voce	5	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBCCPR61	Database Management Systems - Lab	5	4	3	25	75	100
	DSC18	Discipline - Specific Core Course	UBDSPR62	Data Wrangling Lab	4	3		25	75	100
		Discipline-Specific	UBCCDE61	Big Data and Analytics						
	DSE2	Elective (To choose	UBDSDE62	Predictive Modeling and Analytics	4	2	3	25	75	100
VI		1 out of 3)	UBCCDE63	3. Business intelligence and Analytics						
		Skill Enhancement	UBCCSE61	Big Data and Analytics     Lab						
	SEE2	Elective Course (To choose	UBDSSE62	Predictive Modeling and Analytics Lab	2	1	3	25	75	100
		1 out of 3)	UBCCSE63	Business intelligence and Analytics - Lab						
	INT1	Internship	UBDSPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC5	Skill Enhancement Course	UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
	VBC5	Value-Based Course	SWAYAM / Or Bombay - MO	nline Spoken Tutorial by IIT	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	18 0	180	-	1075	3225	4400

The  $90^{\#}$  hours of Apprenticeship/Internship/Project and  $40^{\alpha}$  hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activity is included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, \*Handled by the Allied Department, \*SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	8	36	100	800
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	2	3	100	200
Other Elective Course – Allied (OEC)	9	26	100	900
Discipline - Specific Core Course (DSC)	17	68	100	1700
Discipline-Specific Elective (DSE)	2	7	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

### PROGRAM SPECIFIC OUTCOMES(PSOS)- BSC( DATA SCIENCE)

### By the end of the program, students will be able to

PSO1	Exhibit good domain knowledge and completes the assigned responsibilities
	Effectively and efficiently on par with the expected quality standards.
PSO2	Apply analytical and critical thinking to identify, formulate, analyze, and solve
	complex problems to reach authenticated conclusions
PSO3	Design and develop solutions for complex problems with specified needs through
	appropriate consideration and accuracy.
PSO4	Establish the ability to Listen, read, proficiently communicate and articulate
	Complex ideas with respect to the needs and abilities of diverse audiences.
PSO5	Deliver innovative ideas to instigate new business ventures and possess the qualities
	Of a good entrepreneur
PSO6	Acquire the qualities of a good leader and engage in efficient decision-making.
PSO7	Graduates will be able to undertake any responsibility as an individual/member of
	Multidisciplinary teams and have an understanding of team leadership
PSO8	Function as a socially responsible individual with ethical values and accountability to
	ethically validate any actions or decisions before proceeding and actively contribute to
	the societal concerns.
PSO9	Identify and address your own educational needs in a changing world in ways
	sufficient to Maintain competence and to allow them to contribute to the advancement
	of knowledge
PSO10	Demonstrate knowledge and understanding of management principles and apply
	these to one own work to manage projects in a multidisciplinary environment.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific	Programme Outcomes (POs)									
Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	✓	✓			<b>√</b>	✓	✓			
PSO2	✓		✓	✓	✓		✓			
PSO3	✓	✓	✓	✓			✓			
PSO4	✓	✓	✓	✓			✓	✓		
PSO5	✓				✓	✓	✓	✓	✓	
PSO6	✓	✓	✓	✓	✓		✓	✓		✓
PSO7	✓			<b>√</b>	✓	<b>√</b>	✓	✓	✓	
PSO8	✓	✓	✓	<b>√</b>	✓	<b>√</b>	✓	✓	✓	✓
PSO9	<b>√</b>				<b>√</b>			✓	✓	
PSO10	<b>√</b>				<b>√</b>	✓	✓	<b>√</b>		<b>√</b>
	1	Nun	nber of m	atches	= 61, Cor	relation:	Very High	h		

#### **Mapping Correlation Benchmark**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

# REGULATIONS POSTGRADUATE DEGREE COURSES [CBCS PATTERN] (For the Candidates Admitted from the Academic Year 2022-2023)

#### **CBCS**

A choice-Based Credit System is a Flexible System of learning. Credit defines the quantum of contents/ syllabi prescribed for a course and determines the number of hours of instruction required. The distinguishing features of CBCS are the following:

#### IT PERMITS THE STUDENTS TO:

- Choose electives from a wide range of elective courses offered by various departments of the college
- Undergo additional courses and acquire more than the required number of credits
- Adopt an interdisciplinary approach in learning
- Make the best use of the expertise of available faculty

#### 1. ELIGIBILITY FOR ADMISSION

A candidate is eligible for admission to a Master's degree program if he has completed a three-year undergraduate degree awarded by any University recognized by the UGC in the same subject except for the following:

#### For M.A. English Lit.

Any three-year UG Course with the English language in four semesters is eligible.

#### For M.A. History

Any three-year undergraduate degree holder is eligible

#### For M.Sc. Mathematics

UG degree in Mathematics/Statistics

#### For M.Sc. Physics

UG degree in Physics with Mathematics as one of the Allied Subjects.

#### For M.Sc. Chemistry

UG degree in Chemistry

#### For M.Sc. Biochemistry

UG degrees in Chemistry / Biochemistry / Zoology / Biotechnology are eligible

#### For M.Sc. Biotechnology

UG degrees in Zoology / Biochemistry / Chemistry / Botany / Biotechnology / Microbiology are eligible

#### For M.Com.

UG degree in Commerce / Corporate Secretaryship / Industrial Organization / Business Administration / B.Com.Computer Application / B.Com. Finance & Accounts / B.A. (Eco.) with two Account papers are eligible.

#### 2. CANCELLATION OF ADMISSION

The admission is at the candidate's risk and is provisional, subject to the approval of Thiruvalluvar University. If for any reason, the admission is not approved, the candidate shall not hold the College responsible for it. If selected, in the event of leaving the College after admission but any time before completing the course, the fee for the residual period of the course should be paid by the candidate as per the rules in force.

#### 3. ELIGIBILITY FOR THE AWARD OF A DEGREE

A Candidate shall be eligible for the award of the degree only if he has undergone the prescribed course of study in this College for a period of two academic years and passed the examinations of all the Four Semesters prescribed, earning 90 credits, and fulfilled such conditions as have been prescribed, therefore.

#### 4. DURATION

The duration of the course shall consist of 4 Semesters in two academic years.

- Each academic year shall be divided into two semesters. The first academic year shall comprise the first and second semesters, and the second academic year: the third semester and fourth semesters, respectively.
- b) The odd semesters shall consist of the period from June to November of each year and the even semesters from December to April of each year. There shall be at least 90 working days composed of 450 instructional hours for each semester.

#### 5. COURSE OF STUDY

The main subject of study for Master's degree courses shall consist of Core, Electives, Human Rights, and Research Methodology and Ethics.

#### 6. PROJECT WORK

It is considered a special course involving the application of knowledge in solving/analyzing/exploring real-life situations / difficult problems. The new CBCS provides an opportunity for postgraduate students to learn some research components at this level. The project work would be of 6 credits given in lieu of one discipline-specific paper in the final semester.

The duration of the project work is 90 hours within the College campus included in the Timetable. If the project work requires fieldwork in the industry/data collection / national laboratories or any other reputed institute, the period for such work is assigned as two weeks. If the project work requires fieldwork during the working days of the college, no separate hours are to be earmarked in the final semester Time table.

#### **EVALUATION OF THE PROJECT WORK**

The Project Work should be individual for PG students. Regarding the evaluation of the project work, the total mark is 100. It is divided into 75 marks for project evaluation and 25 marks for the viva-voce examination. The marks for project work evaluation and viva-voce are to be awarded jointly by the internal examiner and the external examiner.

The external examiner is to be drawn from faculty from affiliating University Departments / any Affiliated / Autonomous colleges in the affiliating University Area, offering the respective postgraduate programme.

#### 7. CONTINUOUS INTERNAL ASSESSMENT [CIA] TEST

The following assessment procedure will be followed for Internal Marks:

CIA Test I: Two / Three hours duration for 100 marks

**CIA Test II: Three hours duration for 100 marks** 

Marks Distribution	Theory & Practical
CIA Test Marks 200 to be converted to	10 Marks
Library Usage - 30 hours per Semester for all the courses of PG Programmes	5 Marks
Assignment / Seminar / Observation	5 Marks
Attendance	5 Marks
TOTAL	25 Marks

Reg. No	Name	Test I - 100	Test II - 100	Total - 200	Marks converted to 10	Library Usage Min. 30 hours – 5	Assignment/ Seminar 5	Attendance - 5	Total for 25 (Rounded Off)

In the last column, any fraction may be rounded off to the nearest integer.

The marks for the Attendance component in the Continuous Internal Assessment should be calculated as follows:

Attendance Earned	Category	Marks to be Awarded
90 % and Above	Highly Regular	5
75% but below 90%	Regular	4
65% but below 75%	Shortage	3
55% but below 65%	Detained	2
Below 55 %	Redo	0

The following procedure will be followed for the award of internal marks component of Library Usage:

#### Library Usage for all PG & M.Phil. Programmes - 30 hours per Semester

Library usage for PG & M.Phil. in hours	Marks to be awarded
20 hrs and above	5
10 hrs to < 20 hrs	4
1 hr to < 10 hrs	3

#### 8. REQUIREMENTS FOR PROCEEDING TO SUBSEQUENT SEMESTERS

- I. Candidates shall register their names for the First Semester Examinations after admission to the P.G. Courses.
- II. Candidates shall be permitted to proceed from the First Semester up to the Final Semester irrespective of the number of arrears in any of the End Semester Examinations.
- III. Candidates shall be eligible to go to subsequent semesters as per the attendance rules prescribed by the Governing Body of Islamiah College from time to time.

#### 9. REQUIREMENT TO TAKE THE END SEMESTER EXAMINATIONS

- a) A candidate will be permitted to take the University Examination for any Semester if
- he secures at least 75% of attendance out of the 90 instructional days / 450 instructional hours during the particular Semester.
- he earns a progress Certificate from the Head of the Institution for having satisfactorily completed the Course of Study prescribed in the Subject as required by the Regulations, and
- his conduct has been satisfactory.
- b) A candidate who has secured attendance less than 75% but 65% and above shall be permitted to take the Examination on the recommendation of the Head of the Department and approved by the Principal to condone the lack of attendance as well on the payment of the prescribed condonation fee to the College. A candidate will be permitted to appear for Practical examinations only if they have attended 75% of the practical classes. A candidate who has secured an attendance of less than 65% but 55% and above is detained for that particular semester. He / She will be permitted to write the examinations in the next Odd / Even Semester by paying the prescribed condonation fee.

The candidates who have an attendance of **less than 55% are detained** and they shall **REDO** the semester after completion of the program and after getting readmission that too at the sole discretion of the Principal. However, readmission will be allowed only once during the duration of the program. Those who asked to redo the course can continue their studies without break, but that particular semester after completing the program by attending the special classes arranged by HOD concerned.

The **REDO** students who have already completed their CIA Test and Practical Examination with at least minimum qualifying marks may be exempted from reappearing for the **CIA Test and Practical Examination** again in the readmitted Semester. However, if any student wishes to improve upon his marks, he can appear for the CIA Test and Practical Examinations. In such a case, the original marks or the marks secured in the readmitted semester, whichever is higher, shall be taken as final marks.

#### 10. PASSING MINIMUM

- a. There shall be no Passing Minimum for Internal Assessment.
- b. For End Semester Examinations, the minimum passing Letter Grade shall be "P" (Minimum 50 % of the maximum marks prescribed for the paper).
- c. In the aggregate (End Semester Examination + Internal) the minimum passing Letter Grade shall be "P" for each Paper / Practical / Project and Viva-voce.
- d. Final Grading shall be based on the overall Grade Points earned (Internal + External)

#### 11. GRADING SYSTEM

The marks earned by a candidate in the Internal Assessment and End Semester Examinations for each of the courses will be added. The marks thus obtained will then be converted into Letter Grades and Grade points as per the details given below:

Range of Marks	Letter Grade	Grade Points
96 – 100	0	10
86 – 95	A+	9
76 – 85	Α	8
66 – 75	B+	7
56 – 65	В	6
50 – 55	Р	5
00 – 49	F	0
Absent	Ab	0

#### **ILLUSTRATION OF SGPA**

Semester	Course	Credit	Grade Letter	Grade Point	Credit Point [Credit x Grade]
	Course 1	5	A +	9	45
I	Course 2	5	Α	8	40
	Course 3	4	0	10	40
	Course 4	4	Р	5	20
	Elective	4	В	6	24
	Total	22			169
	Course 1	5	Р	5	25
II	Course 2	5	B+	7	35
	Course 3	4	0	10	40
	Course 4	4	Α	8	32
	Elective	4	A+	9	36
	Human Rights (AEC)	-	-	-	-
	Total	22			168
	Course 1	5	A+	0	45
III	Course 2	5	0	10	50
	Course 3	4	В	6	24
	Course 4	4	В	6	24
	Elective	4	Р	5	20
	Total	22			163
	Course 1	5	0	10	50
IV	Course 2	5	Α	8	40
	Course 3	4	A+	9	36
	Course 4 /	4	B+	7	28
	Project Work				
	Elective	4	Р	5	20
	Non-Major Elective	2	Ο	10	20
	Total	24			194

For Example, the calculation of SGPA for the Four Semesters are calculated as follows:

SGPA I = 
$$\frac{169}{22}$$
 = 7.7  
SGPA II =  $\frac{168}{22}$  = 7.6  
SGPA III =  $\frac{163}{22}$  = 7.4  
SGPA IV =  $\frac{194}{24}$  = 8.1

The CGPA for the PG degree is:

$$CGPA = \frac{169 + 168 + 163 + 194}{90} = \frac{694}{90} = 7.7$$

#### 12. CLASSIFICATION OF SUCCESSFUL CANDIDATES

Successful candidates who passed all the specified courses in a program are classified as follows:

Passed all the courses with a CGPA of 7.5 and above: First Class with Distinction without any arrear

Passed all the courses with a CGPA of 6 to 7.4 : First Class
Passed all the courses with a CGPA of 5.5 to 5.9 : Second Class

The total performance within a semester and continuous performance starting from the first semester are indicated respectively by **Grade point Average (GPA) and Cumulative Grade point Average (CGPA).** These two are calculated by the following formula.

$$GPA = \frac{\sum_i C_i G_i}{\sum_i C_i} = \frac{Sum \ of \ the \ product \ of \ credits \ and \ grade \ points \ earned}{Sum \ of \ the \ credits \ of \ the \ courses \ in \ a \ Semester}$$

$$CGPA = \frac{\sum_{n} \sum_{i} C_{ni} G_{ni}}{\sum_{n} \sum_{i} C_{ni}}$$

= Sum of the product of the credits and grade points earned
Sum of the credits for the entire programme

Where  $C_i$  is the credit earned for the course i in any semester,  $G_i$  is the grade point obtained by the student for the course i and n is the number of courses passed in that semester. CGPA is the GPA of all the courses starting from the first semester to the current semester.

#### 13. THE MEDIUM OF INSTRUCTION AND EXAMINATIONS

The medium of instruction and Question Paper shall be in English. The candidates having arrears in odd/even semesters shall appear for such papers in the next End Semester's Examinations.

#### 14. SUBMISSION OF RECORD NOTEBOOKS FOR PRACTICAL EXAMINATIONS

Candidates taking the practical Examinations should submit Bonafide Record Note Books prescribed for the Practical Examinations. Otherwise, the candidates will not be permitted to take the Practical Examinations. However, in genuine cases, where students could not submit the record notebooks may be permitted to take the Practical Examinations

provided the Head of the Department and the Course Teacher concerned certify that the candidate has performed the experiments prescribed for the course. For such candidates who do not submit Record Books, zero marks will be awarded for record notebooks in the Practical Examination concerned.

In case a candidate does not secure the prescribed passing minimum in the Practical Examination, the marks awarded for the Record Note Book at the time of the first appearance for the Practical Examination should be made available by the Head of the Department concerned.

#### 15. IMPROVEMENT OF MARKS IN THE COURSES ALREADY PASSED

Candidates desirous of improving the marks secured in a passed course shall reappear in the immediate next End Semester Examination. The improvement in Letter Grade shall be considered for Classification / Distinction. If there is no improvement, there shall not be any change in the original Letter Grade already obtained. The fee for such appearances will be as decided by the Governing Body from time to time. The candidate will not be allowed to improve marks in the Practicals, Project, Viva-Voce and fieldwork.

#### 16. SELF-SUPPORTIVE COURSES

The above Regulations shall be applicable to candidates undergoing the respective self-supportive courses also.

#### 17. MOOC COURSE

All the UG, PG and M.Phil candidates admitted from the academic year 2022-2023 shall have to complete one MOOC of a minimum of 4 weeks duration mandatory and the certificate of completion of MOOC is to be submitted.

#### **18. RANK HOLDERS**

The students who secure the highest marks in aggregate of all the subjects in the first attempt of the autonomous examinations will be the Rank holders. This applies to all UG/PG/ M.Phil. Programs of our College. The Rank Holder will be awarded a certificate and prize. admitted from

#### 19. TRANSITORY PROVISION

Candidates who have joined the program from the academic year 2022-23 will be permitted to appear for the examinations under this Regulation for a maximum period of **FOUR** years. Thereafter, they will be permitted to appear for the examinations only under the new Regulations in force. The equivalent paper to be written will be decided by the Chairman of the respective BOS. Such candidates have to reregister for the course. The fee for such re-registration will be as decided by the Governing Body from time to time.

#### 20. QUESTION PAPER PATTERN FOR PG PROGRAMMES

PART A	To answer All the 15MCQs (Three questions from each UNIT)	15 x 1 = 15 Marks					
PART B	To answer All the 5 questions (One question from each UNIT)	5 x 3 = 15 Marks					
PART C	To answer All the 5 questions (either or type) (One question from each UNIT)	5 x 5 = 25 Marks					
PART D	To answer 3 questions (out of 5 questions) (One question from each UNIT)	3 x15 =45 Marks					
TOTAL 100 Marks*							
* To be converted to 75 Marks							
(Equal Weightage should be given to each unit)							

# ISLAMIAH COLLEGE (AUTONOMOUS) COURSE STRUCTURE FOR UG PROGRAMMES (CBCS PATTERN)

(For the Candidates admitted from the academic year 2022 – 2023)

#### PROGRAMME OUTCOME FOR M.A. ENGLISH

- **PO1** Conduct Research independently to bring out new facts and strengthen the existing body of knowledge. Communicate the findings of Research through well structured Report.
- PO2 Demonstrate domain-specific knowledge and its applications in real-life situations
- **PO3** Synthesise learned knowledge and skills to effectively and efficiently perform the job duties of a profession
- **PO4** Critically evaluate a situation and suggest a solution after careful consideration of the alternatives
- PO5 Exhibit potential to accomplish tasks independently or as a member or leader of a team
- **PO6** Plan and Execute a Project after careful evaluation of the activities involved
- PO7 Develop products, Design Policies, and/or collaborate to help Society in building a Sustainable Environment
- PO8 Discover a passion for Lifelong Learning through MOOCs, ODL, and Self Learning techniques through the optimum use of ICT
- **PO9** Identify the need and importance of Human Rights, especially for Women, Children, Bonded Labourers, and Refugees.
- **PO10** Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future

#### **COURSE STRUCTURE FOR M.A. ENGLISH** (For the candidates admitted from the academic year 2022-2023) Hrs./Week Semester 불 **FOTAL** Credit ESE Part S Course Category **Course Title** Exam. Code Discipline - Specific DSC<sub>1</sub> PBEN1001 5 3 British Literature I 6 25 75 100 Core Course Discipline - Specific DSC<sub>2</sub> PBEN1002 5 100 Indian Literature in English 6 3 25 75 Core Course Discipline - Specific DSC<sub>3</sub> **PBEN1003** American Literature 4 3 100 6 25 75 Core Course I Discipline - Specific DSC<sub>4</sub> PBEN1004 Women's Writing in English 6 4 3 25 75 100 Core Course 1. Critical Interpretation of PBENDE11 Discipline-Specific R.K. Narayan Elective Course (To **DSEI** 6 4 3 25 75 100 PBENDE12 2. Indian English Poetry choose 1 out of 3) PBENDE13 3. Modern English Literature **TOTAL** 30 22 -125 375 500 Discipline - Specific DSC<sub>5</sub> PBEN2001 British Literature II 5 5 3 25 75 100 Core Course Discipline - Specific English Language and DSC6 6 5 3 **PBEN2002** 25 75 100 Core Course Linguistics Discipline - Specific DSC<sub>7</sub> **PBEN2003** New Literature in English 6 4 3 25 75 100 Core Course Discipline - Specific DSC8 **PBEN2004** Post-Colonial Literature 5 4 3 25 75 100 Core Course Ш Value-Based **VBCI** 2 3 25 100 PBHR2001 Human Rights 75 Course 1. New Trends of PBENDE21 Contemporary Discipline-Specific Literature DSE<sub>2</sub> Elective Course (To 4 25 75 100 6 3 PBENDE22 2. Post Modernism choose 1 out of 3) 3. Critical Interpretation of PBENDE23 **English Poetry** TOTAL 30 22 150 450 600 **Modern and Postmodern** Discipline - Specific DSC9 **PBEN3001** 6 4 3 25 75 100 Core Course Literature Discipline - Specific **Literary Theory and** DSC<sub>10</sub> **PBEN3002** 6 4 3 25 75 100 Core Course Criticism I Discipline - Specific **English Language** DSC11 5 **PBEN3003** 4 3 25 75 100 **Teaching** Core Course Discipline - Specific **DSC12 PBEN3004** 5 4 Subaltern Literature 3 25 75 100 Core Course Ш Research Methodology & Value-Based VBC2 PBENVB31 3 3 3 100 25 75 **Ethics** Course 1. Interpretation of PBENDE31 Literature Discipline-Specific 2. South Asian Literature DSE<sub>3</sub> Elective Course (To PBENDE32 5 3 3 25 75 100 in Translation choose 1 out of 3) 3. Aesthetics in English PBENDE33 Literature 30 150 600 **TOTAL** 22 \_ 450 Literary Theory and Discipline - Specific DSC13 **PBEN4001** 6 5 3 25 75 100 Core Course Criticism II Discipline - Specific **PBEN4002** IV DSC14 **Shakespeare Studies** 6 4 3 25 75 100 Core Course Discipline - Specific **PBEN4003** DSC15 **Special Authors** 5 4 3 25 75 100 Core Course

DSC16	Skill Enhancement Course (Project)	PBENPJ41	Project	5	4	3	25	75	100
OEC1	Other Elective Course	PBENNM41	Computer Literacy in Teaching	3	2	3	25	75	100
	Discipline-Specific	PBENDE41	Success with     Language						
DSE4 Elective Cours	Elective Course (To	PBENDE42	2. Technical Writing	5	4	3	25	75	100
	choose 1 out of 2)	PBENDE43	3. Principles of Public Speaking						
VBC2	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC®		•	1	ı	•	•	-
		TOTAL		30	24	-	150	450	600
		GRAND TOTAL		120	90	-	575	1725	2300

#### PROGRAMME SPECIFIC OUTCOMES

PSO1	Illustrate the connection between modern themes and classical and romantic ideas
PSO2	Explains the methodical approach to the literature and categorize it.
PSO3	Compare the language's scientific and non-scientific ways of doing things.
PSO4	Discovers the visual arts which is a vexing and complex history.
PSO5	Connects the language as the study of reasoning and the theory of language.
PSO6	Defends why people are complicit with their ideological construction,
PSO7	Develops the systematic study of literature and methods to analyze
PSO8	Writes effectiveness of rational inquiry, and logical and empirical investigations.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme	Programme Outcomes (POs)									
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO2	✓	✓		✓	✓	✓	✓	✓	✓	
PSO3	✓	✓	✓	✓	✓	✓	✓	✓	✓	
PSO4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO5	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓	✓	
PSO6	✓	✓	✓	✓	✓	✓	✓	✓	✓	
PSO7	✓	✓	✓	✓	✓	✓	✓	✓		✓
PSO8	<b>✓</b>	✓	✓	✓	✓	✓	✓	<b>√</b>		<b>√</b>
	Number of matches = 74, Correlation: Very High									

#### MAPPING CORRELATION BENCHMARK

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### **COURSE STRUCTURE FOR M.A. HISTORY** (For the candidates admitted from the academic year 2022-2023) Exam. Hrs. Semester Hrs./Week Credit **POTAL** ESE Part Course Category **Course Title** Code Discipline -Social and Cultural History DSC<sub>1</sub> Specific Core PBHI1001 6 5 3 25 75 100 of India up to CE 1206 Course Discipline -Social and Cultural History DSC<sub>2</sub> Specific Core PBHI1002 of Tamil Nadu up to CE 6 5 3 25 75 100 Course 1565 Discipline -History of Ancient Specific Core DSC<sub>3</sub> PBHI1003 6 4 3 25 75 100 Civilizations Course Discipline -Islamic History from CE 500 DSC<sub>4</sub> Specific Core PBHI1004 6 4 3 25 75 100 to 750 Course PBHIDE11 1. Travel Management Discipline-2. Principles of Specific Elective PBHIDE12 Archaeology **DSEI** Course (To 6 3 25 75 100 4 3. History of Peasant and choose 1 out of PBHIDE13 Labour Movement in 3) Modern India TOTAL 30 22 \_ 125 375 500 Discipline -Social and Cultural History DSC<sub>5</sub> Specific Core PBHI2001 of India from CE 1206 to 5 5 3 25 75 100 Course Social and Cultural History Discipline -DSC<sub>6</sub> Specific Core PBHI2002 of Tamil Nadu from CE 6 5 3 25 75 100 Course 1565 to 2016 Discipline -History of Medieval DSC7 Specific Core PBHI2003 6 4 3 25 75 100 Civilizations Course Discipline -Ш Islamic History from CE 750 DSC8 Specific Core PBHI2004 5 25 75 100 4 3 to 1258 Course Value-Based **VBCI** Human Rights PBHR2001 2 3 25 75 100 Course PBHIDE21 1. Hotel Management Discipline-Specific Elective 2. Introduction to Epigraphy PBHIDE22 DSE<sub>2</sub> Course 6 3 25 100 4 75 And Numismatics In India (To choose 1 3. Makers of Modern PBHIDE23 out of 3) India I TOTAL 30 22 150 450 600 Social and Cultural Discipline -DSC9 Specific Core PBHI3001 **History of India from CE** 6 4 3 25 75 100 1857 to 2010 Course Discipline -**History of Modern PBHI3002** 6 **DSC10** Specific Core 4 3 25 75 100 Civilizations Course Discipline -Ш **DSC11** Specific Core **PBHI3003** Historiography 5 4 3 25 75 100 Course Discipline -**History of the Ottoman** Specific Core **PBHI3004** 5 25 75 100 DSC<sub>12</sub> 4 3 **Empire** Course Research Methodology & Value-Based VBC2 PBHIVB31 3 3 3 25 75 100 **Ethics** Course

		Discipline-	PBHIDE31	1. Economic History of Medieval India						
	DSE3	Specific Elective Course	PBHIDE32	2. Principles of Museology	5	3	3	25	75	100
		(To choose 1 out of 3)	PBHIDE33	3. Makers of Modern India II	-					
				TOTAL	30	22	1	150	450	600
	DSC13	Discipline - Specific Core Course	PBHI4001	Growth of Panchayati Raj Institutions in India (with special reference to Tamil Nadu)	6	5	3	25	75	100
	DSC14	Discipline - Specific Core Course	PBHI4002	History of Modern West Asia	6	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	PBHI4003	History of England from CE 1603 to 1945	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	PBHI4004	Muslims Contribution to Humanity	5	4	3	25	75	100
IV	OEC1	Other Elective Course	PBHINM41	Introduction to Journalism	3	2	3	25	75	100
IV		Discipline- Specific Elective	PBHIDE41	Economic History of     Modern India						
	DSE4	Course (To choose 1	PBHIDE42	2. Introduction to Sociology	5	4	3	25	75	100
		out of 3)	PBHIDE43	3. Indian Geography						
	VBC2	Value-Based Course	SWAYAM / 0 IIT Bombay	Online Spoken Tutorial by - MOOC@		1	-	-	-	-
				TOTAL	30	24	ı	150	450	600
				GRAND TOTAL	120	90	-	575	1725	2300

<sup>@</sup> SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOCis Mandatory for all PG programs and an additional one credit is taken for the calculation of CGPA

## Programme Specific Outcomes (PSO'S) of the PG Programme in History After the completion of the M.A. History programme, the students will be able to

PSO 1	Recognize the historical events of the world and our nation to inculcate the social and individual values and skills required for a successful social life and individual
	accomplishments.
PSO 2	Compare the variety of resources like archaeological remains, documents, libraries, and e-resources for documentation and ensure their effective utilization.
PSO 3	Develop the skills to identify the cause and effect of any historical event to evolve conclusions and serve the faculty of History and enhance skills to shine in allied industries.
PSO 4	Develop the aptitude for Research with the ability to identify research questions, and select an appropriate analysis method to resolve and effectively Presentation of conclusions.
PSO 5	Develop the skills to compete for a career in the field of Historical studies as a teacher, researcher, and other associated professions and also in the allied disciplines like the tourism industry as well plan research oriented Higher Education in the field of History and allied disciplines.
PSO 6	Apply soft skills to communicate orally and in written form their viewpoints in an effective manner.
PSO 7	Relate the knowledge of allied disciplines to a proper understanding of History and engage in life-long learning of allied disciplines.
PSO 8	Appraise the diversities in the world arising out of diverse conditions and apply the knowledge to contribute to a better world.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific	Programme Outcomes (POs)											
Outcomes (PSOs)	Р	0	1	PO2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO10
PSO1				✓	✓		✓	✓	✓		✓	✓
PSO2		✓		✓	✓		✓	✓	✓	✓		
PSO3		✓		✓	✓	✓	✓	✓	✓			
PSO4		✓		✓	✓	✓	✓	✓	✓		✓	✓
PSO5		✓		✓	✓			✓	✓	✓	✓	✓
PSO6				✓		✓	✓	✓	✓			
PSO7				✓		✓	✓	✓		✓		
PSO8		✓				✓	✓	✓	✓	✓	✓	✓
Number of Matches = 59 Correlation: Very High												

### **Mapping Correlation Benchmark**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

# M.COM. DEGREE PROGRAMME (CBCS PATTERN) (For Students admitted from Academic Year 2022-2023) PROGRAMME OUTCOMES

- PO1 Conduct Business Research to identify problems and suggest solutions, aiding in the Business Decision-Making Process. Communicate the findings of Research through well structured Report.
- PO2 Demonstrate knowledge of the concepts, principles, theories, and techniques related to various forms, facets, and functions of Business
- PO3 Synthesize learned knowledge and acquired skills to establish, organize, manage and/or develop a business/organisation effectively and efficiently in the capacity of an entrepreneur, businessman, or any other professional
- PO4 Critically evaluate a problem/environment and take informed business decisions to solve problems
- **PO5** Exhibit potential to accomplish tasks independently or as a member or leader of a team
- **PO6** Use Computers, Software, Internet, and other ICT tools to maximize resource utilization and increase efficiency in day-to-day business operations
- **PO7** Develop products, Frame Policies, and/or collaborate to help Society in increasing living standards and towards building a Sustainable Environment
- PO8 Discover a passion for Lifelong Learning through MOOCs, ODL, and Self-Learning techniques through the optimum use of ICT.
- **PO9** Identify the need and importance of Human Rights, especially for Women, Children, Bonded Labourers, and Refugees.
- **PO10** Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future.

#### COURSE STRUCTURE FOR M.COM. (For the candidates admitted from the academic year 2022-2023) Semester Hrs./Weel TOTAL Part Credit Exam Hrs. ESE Course SE Category **Course Title** Code Discipline - Specific DSC<sub>1</sub> PBCO1001 6 5 3 25 75 100 Marketing Management Core Course Discipline - Specific **Advanced Management** DSC<sub>2</sub> PBCO1002 6 5 3 25 75 100 Core Course Accounting Discipline - Specific DSC<sub>3</sub> PBCO1003 **Advanced Business Statistics** 6 4 3 25 75 100 Core Course I Discipline - Specific DSC<sub>4</sub> PBCO1004 6 4 3 75 100 Global Financial System 25 Core Course PBCODE11 1. Strategic Management Discipline-Specific **DSEI** Elective Course (To PBCODE12 2. Corporate Management 6 4 3 25 75 100 choose 1 out of 3) PBCODE13 3. Corporate Laws TOTAL 375 500 30 22 -125 Discipline - Specific Strategic Human Resource DSC<sub>5</sub> PBCO2001 5 5 3 75 100 25 Core Course Management Discipline - Specific Advanced Financial DSC<sub>6</sub> PBCO2002 6 5 3 75 100 25 Core Course Management Discipline - Specific Resource Management DSC7 6 4 3 PBCO2003 25 75 100 Core Course Techniques Discipline - Specific DSC8 Ш **Business Environment** PBCO2004 5 4 3 25 75 100 Core Course **VBCI** Value-Based Course PBHR2001 **Human Rights** 2 3 25 75 100 1. International Business PBCODE21 Discipline-Specific DSE<sub>2</sub> Elective Course (To PBCODE22 2. EXIM Management 6 4 3 25 75 100 choose 1 out of 3) PBCODE23 3. Supply Chain Management **TOTAL** 30 22 \_ 150 450 600 Discipline - Specific DSC9 PBC03001 **Advanced Accounting** 6 4 3 25 75 100 Core Course Discipline - Specific DSC<sub>10</sub> **PBCO3002** 4 **Indirect Taxes** 6 3 25 75 100 Core Course Discipline - Specific Security Analysis & **DSC11 PBCO3003** 3 5 4 25 75 100 Portfolio Management Core Course Discipline - Specific **DSC12 PBCO3004 Business Analytics** 5 4 3 75 100 25 Core Course Ш Research Methodology & VBC1 Value-Based Course PBCOVB31 3 3 3 25 75 100 **Ethics** PBCODE31 1. Consumer Behaviour Discipline-Specific 2. Performance & DSE3 Elective Course (To PBCODE32 5 3 Compensation 3 25 75 100 choose 1 out of 3) Management PBCODE33 3. Corporate Finance **TOTAL** 30 22 150 450 600 Discipline - Specific DSC13 PBCO4001 **Advanced Cost Accounting** 6 5 3 25 75 100 Core Course Discipline - Specific DSC14 **PBCO4002 Direct Taxes** 6 4 3 25 75 100 Core Course IV Entrepreneurial Discipline - Specific **DSC15 PBCO4003 Development & New** 5 4 3 25 75 100 Core Course **Venture Creation** Discipline - Specific **Business Ethics &** DSC16 **PBCO4004** 5 4 3 25 75 100 Core Course **Corporate Governance**

	OEC1	Other Elective Course	PBCONMP4	Data Analyses using SPSS- Lab	3	2	3	25	75	100
			PBCODE41	1. Organisational Behaviour			1			
DS	DSE4	Discipline-Specific Elective Course (To	PBCODE42	2. Integrated Marketing Communications	5	4	3	25	75	100
		choose 1 out of 3)	PBCODE43	3. Microfinance Management						
	VBC2	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@			1	ı	-	-	ı
				TOTAL	30	24	-	150	450	600
				GRAND TOTAL	120	90	-	575	1725	2300

<sup>@</sup> SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all PG programs, and an additional one credit is taken for the calculation of CGPAP

#### PROGRAMME SPECIFIC OUTCOMES for M.COM.

**PSO1** Prepare Accounts to evaluate business/organization/corporate firms & their operations, analyze and assist in Business Decision Making for increasing profitability, decreasing costs, selecting from various alternatives and Reporting the statements.

**PSO2** Develop Entrepreneurial intent, skills, and abilities and make students capable of professionally Communicating, Organising & Managing Business operations, especially the strategic management of Accounting & Finances, Human Resources, and Marketing and carrying out research.

**PSO3** Analyse the Economic and Business Environment, utilize Accounting and Quantitative Techniques, Descriptive and Inferential Statistical tools for data analysis and make business decisions accordingly. Comprehend the role, process and techniques of Business Analytics. Conduct Business Research to identify problems and communicate the results to suggest solutions

**PSO4** Understand various Acts & legal provisions with regard to/governing the operation of Businesses, and Corporate and comprehend the Indirect Taxes levied in India. Appreciate the need for Corporate Social Responsibility, Sustainability reporting and understand the process and legalities related to it.

**PSO5** Understand the concepts of Income Tax and use it to compute Income Tax payable by Individuals and Firms, allowing for further Tax Planning, Management & Filing of returns.

**PSO6** Understand the behaviour of individuals in a workplace, research and enact policies to increase the productivity of the organization. Develop and hone necessary

Entrepreneurship Skills, Employability skills, Team working Attitude and inculcate research, and ethics in personal and professional walks of life.

**PSO7** Understand the theories and concepts in International Business, International Business & Financial Environment, and Comprehend procedures & documentation involved in Export / Import.

**PSO8** Understand and Apply the principles, techniques and strategies for effectively managing Marketing, Human Resources, Accounting & Finances, Portfolio, Supply Chain, Advertising & Sales. Utilise the techniques of Analysing Securities for their Profitability and Wealth Generation

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme				Progr	amme	Outcom	nes (PO	s)		
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1		~	~	~	~					
PSO2	~	~	~	~	~	~	~	~	~	
PSO3	<b>~</b>	~	~	~	~	~		~		~
PSO4		~	~	~	~		~	~	~	~
PSO5		~	~			~				~
PSO6	<b>~</b>	~	~		~	~	~	~	~	~
PSO7		~	~	~	~	~	<b>V</b>	~		~
PSO8	<b>~</b>	~	~	~	~	~	<b>V</b>	~		~
Number of matches = 59, Correlation: Very High										

## **Mapping Correlation Benchmark**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### PROGRAMME OUTCOMES FOR M.Sc. PROGRAMMES

- PO11 Demonstrate knowledge and scientific understanding to identify research problems, design experiments, use appropriate methodologies, analyze and interpret data and provide solutions, and Exhibit organizational skills, and the ability to manage time and resources.
- **PO12** Demonstrate knowledge of the concepts, principles, theories, and techniques of the domain and allied subject areas.
- PO13 Synergise knowledge with Analytical & Experimental skills to systematically, create & run programs/carry out experiments/ formulate & prove theories to enrich the body of knowledge.
- PO14 Identify and critically analyze pertinent problems in the relevant discipline using appropriate tools and techniques.
- **PO15** Exhibit potential to accomplish tasks independently or as a member or leader of a team.
- PO16 Utilize specialized instruments and Equipment, Computers, Software, Internet, and other ICT tools to carry out experiments.
- PO17 Create Compounds/Products/Software or Design experiments and/or collaborate to help Society in building a Sustainable Environment.
- PO18 Discover a passion for Lifelong Learning through MOOCs, ODL, and Self Learning techniques through optimum use of ICT.
- PO19 Identify the need and importance of Human Rights, especially for Women, Children, Bonded Labourers, and Refugees.
- **PO20** Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future.

# Course Structure for M.Sc. Mathematics (For the Candidates admitted from the Academic Year 2022-2023)

Sem	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
	DSC1	Discipline Specific Core Course	PBMS1001	Algebra I	6	5	3	25	75	100
	DSC2	Discipline Specific Core Course	PBMS1002	Real Analysis I	6	5	3	25	75	100
	DSC3	Discipline Specific Core Course	PBMS1003	Ordinary Differential Equations	6	4	3	25	75	100
ı	DSC4	Discipline Specific Core Course	PBMS1004	Classical Dynamics	6	4	3	25	75	100
		Discipline Specific	PBMSDE11	Operations Research I						
	DSEI	Elective Course (To choose 1 out	PBMSDE12	Advanced Graph Theory	6	4	3	25	75	100
		of 3)	PBMSDE13	Algebraic Number Theory						
				TOTAL	30	22	-	125	375	500
	DSC5	Discipline Specific Core Course	PBMS2001	Algebra II	5	5	3	25	75	100
	DSC6	Discipline Specific Core Course	PBMS2002	Real Analysis II	6	5	3	25	75	100
	DSC7	Discipline Specific Core Course	PBMS2003	Partial Differential Equations	6	4	3	25	75	100
II	DSC8	Discipline Specific Core Course	PBMS2004	Advanced Integral Equations	5	4	3	25	75	100
	VBCI	Value-Based Course	PBHR2001	Human Rights	2	-	3	25	75	100
		Discipline Specific	PBMSDE21	Operations Research II						
	DSE2	Elective Course	PBMSDE22	Tensor Analysis	6	4	3	25	75	100
		(To choose 1 out of 3)	PBMSDE23	Stochastic Processes						
				TOTAL	30	22	-	150	450	600
	DSC9	Discipline Specific Core Course	PBMS3001	Complex Analysis I	6	4	3	25	75	100
-	DSC10	Discipline Specific Core Course	PBMS3002	Topology	6	4	3	25	75	100
III	DSC11	Discipline Specific Core Course	PBMS3003	Probability Theory	5	4	3	25	75	100
	DSC12	Discipline Specific Core Course	PBMS3004	Differential Geometry	5	4	3	25	75	100
	VBC1	Value-Based Course	PBMSVB31	Research Methodology & Ethics	3	3	3	25	75	100

		Discipline Specific	PBMSDE31	Calculus of Variations						
	DSE3	Elective Course	PBMSDE32	Actuarial Mathematics	5	3	3	25	75	100
		(To choose 1 out of 3)	PBMSDE33	Discrete Mathematics						
				TOTAL	30	22	-	150	450	600
	DSC13	Discipline Specific Core Course	PBMS4001	Complex Analysis II	6	5	3	25	75	100
	DSC14	Discipline Specific Core Course	PBMS4002	Functional Analysis	6	4	3	25	75	100
	DSC15	Discipline Specific Core Course	PBMS4003	MS4003 Mathematical Statistics		4	3	25	75	100
IV	DSC16	Discipline Specific Core Course	PBMS4004	Modern Fluid Dynamics	5	4	3	25	75	100
	SEC1	Skill Enhancement (Pract.)	PBMSNMP4	Mathematics Lab	3	2	3	25	75	100
		Discipline Specific	PBMSDE41	Number Theory and Cryptography			3			
	DSE4	Elective Course (To choose 1 out of 3)	PBMSDE42	Advanced Numerical Analysis	5	4		25	75	100
		013)	PBMSDE43	Optimization Techniques						
	VBC2	Value-Based Course	SWAYAM / On Bombay - MOO	lline Spoken Tutorial by IIT DC <sup>®</sup>	-	1	-	-	-	-
			TOTAL		30	24	-	150	450	600
			GRAND TOT	120	90	-	575	1725	2300	
	@0\4\4\4	AAA / Ooding - Oodelaan T			- 11 DO					1:4

 $<sup>^{@}</sup>$ SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOCis Mandatory for all PG programs and an additional one credit is taken for the calculation of CGPA

## PROGRAM SPECIFIC OUTCOMES (PSOs) By the end of the program, the students will be able to

PSO1	Understand in-depth knowledge of pure and applied mathematics.
PSO2	Attain the ability to solve challenging problems in Mathematics and prove the abstract theorem.
PSO3	Know the specialized area of mathematics and its applications.
PSO4	Analyse practical problems and propose a solution.
PSO5	Obtain the exact solutions for society-oriented problems by mathematical models.
PSO6	Discuss in groups or individually in multidisciplinary tasks. solution.
PSO7	Crack the NET / SET examination conducted by UGC-CSIR / NTA or State Universities.
PSO8	Apply the mathematical concepts in real-life situations.

## MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific		Programme Outcomes (POs)									
Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	
PSO1	✓	✓	<b>√</b>				<b>√</b>	<b>√</b>	<b>√</b>		
PSO2											
PSO3	✓	✓		<b>√</b>	<b>√</b>	<b>√</b>		✓	✓		
PSO4	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>	<b>✓</b>		
PSO5		<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>				<b>√</b>	✓	
PSO6	<b>√</b>	<b>√</b>		<b>√</b>	✓	<b>√</b>		✓	✓		
PSO7		<b>✓</b>	<b>√</b>		<b>√</b>	<b>✓</b>	<b>√</b>	✓			
PS08											
	Number of Matches = 52, Correlation: High										

## **Mapping Correlation Benchmark**

Mapping	1-29%	30-59%	60-69%	70-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

	COURSE STRUCTURE FOR M.SC. PHYSICS											
	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL		
	DSC1	Discipline - Specific Core Course	PBPY1001	Mathematical Physics	6	5	3	25	75	100		
	DSC2	Discipline - Specific Core Course	PBPY1002	Classical Mechanics	6	5	3	25	75	100		
1	DSC3	Discipline - Specific Core Course	PBPY1003	Quantum Mechanics I	6	4	3	25	75	100		
	DSC4	Discipline Specific Core Pract.	PBPYPR11	Practical I General Physics Experiments-I	6	4	4	25	75	100		
	DSEI	Discipline- Specific Elective	PBPYDE11	Semiconductor Devices and Integrated circuits     Computational Methods and				0.5		100		
		Course (To choose 1 out of 3)	PBPYDE12 PBPYDE13	Programming 3. Fundamental Concepts of Semiconductor	6	4	3	25	75	100		
				TOTAL	30	22	-	125	375	500		
	DSC5	Discipline - Specific Core Course	PBPY2001	Statistical Physics	5	5	3	25	75	100		
	DSC6	Discipline - Specific Core Course	PBPY2002	Electromagnetic & Plasma Physics	6	5	3	25	75	100		
	DSC7	Discipline - Specific Core Course	PBPY2003	Quantum Mechanics II	6	4	3	25	75	100		
II	DSC8	Discipline Specific Core Pract.	PBPYPR21	Practical II Electronics Experiments I	5	4	4	25	75	100		
	VBCI	Value-Based Course	PBHR2001	Human Rights	2	-	3	25	75	100		
	DSE2	Discipline- Specific Elective	PBPYDE21	1. Molecular Spectroscopy								
	DSEZ	Course (To	PBPYDE22	2. Astrophysics	6	4	3	25	75	100		
		choose 1 out of 3)	PBPYDE23	3. Superconductivity								
				TOTAL	30	22	-	150	450	600		
	DSC9	Discipline - Specific Core Course	PBPY3001	Solid State Physics I	6	4	3	25	75	100		
	DSC10	Discipline - Specific Core Course	PBPY3002	Nuclear and Particle Physics	6	4	3	25	75	100		
III	DSC11	Discipline - Specific Core Course	PBPY3003	Physics of Crystals	5	4	3	25	75	100		
	DSC12	Discipline Specific Core Pract.	PBPYPR31	Practical III General Physics Experiments II	5	4	6	25	75	100		
	VBC2	Value-Based Course	PBPYVB31	Research Methodology & Ethics	3	3	3	25	75	100		

DSE3	Discipline-	PBPYDE31	1. Sensor Systems						
DSE3	Specific Elective Course (To	PBPYDE32	2. Non-Linear Optics	5	3	3	25	75	100
	choose 1 out of 3)	PBPYDE33	3 Synthesis and Characterization of Nanomaterials	3	3	3	25	75	100
			TOTAL	30	22	-	150	450	600
DSC13	Discipline - Specific Core Course	PBPY4001	Solid State Physics II	6	5	3	25	75	100
DSC14	Discipline - Specific Core Course	PBPY4002	Thin Films and Surface Analysis	6	4	3	25	75	100
DSC15	Discipline Specific Core Pract.	PBPYPR41	Practical IV Microprocessor and Computer Programming	5	4	6	25	75	100
SEC1	Skill Enhancement Course (Project)	PBPYPJ41	Project With Viva	5	4	6	25	75	100
OEC1	Other Elective Course	PBPYNM41	Bio-Medical Instrumentation	3	2	3	25	75	100
DSE4	Discipline- Specific Elective	PBPYDE41	1. Microprocessors and Microcontroller						
	Course (To	PBPYDE42	2. Bio-Physics	5	4	3	25	75	100
	choose 1 out of 3)	PBPYDE43	3. Introduction to Spintronics						
VBC2	Value-Based Course	SWAYAM / C Bombay - MC	Online Spoken Tutorial by IIT OOC@	-	1	-	-	-	-
		TOTAL		30	24	-	150	450	600
		GRAND TOTAL		120	90	-	575	1725	2300

<sup>@</sup> SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOCis Mandatory for all PG programs and an additional one credit is taken for the calculation of CGPA

### PROGRAM SPECIFIC OUTCOMES (PSOs): By the end of the program, the students will be able to

**PSO1** Understand principles of physics for the scientific phenomena in the classical domain.

**PSO2** Understand the mathematical techniques for describing in-depth knowledge of physical concepts.

**PSO3** Understand and apply statistical methods for describing the classical and quantum particles in various physical systems and processes.

**PSO4** Understand and apply interdisciplinary concepts for understanding and describing natural phenomena.

**PSO5** Understand the principles of Quantum mechanics for knowing the physical systems in the quantum arena.

- **PSO6** Provide exposure to various specializations of Physics (Solid State Physics/Nuclear Physics/Particle Physics).
- **PSO7** Provide exposure to modern experimental/theoretical methods for measurement, observation and fundamental understanding of physical phenomena/systems.
- **PSO8** Engage in research and life-long learning to adapt to changing environment

## MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme				Prog	ramme (	Outcomes	(POs)			
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓		✓		✓	✓		✓	✓
PSO2	✓	✓	✓	✓		✓	✓		✓	✓
PSO3	✓	✓	✓	✓			✓	✓	✓	✓
PSO4	✓	✓		✓	✓		✓	✓	✓	✓
PSO5	✓	✓		✓		✓		✓	✓	✓
PSO6	✓	✓	✓	✓	✓	✓		✓	✓	✓
PSO7	✓	✓	✓	<b>✓</b>	✓	✓	✓	✓	<b>✓</b>	<b>✓</b>
PSO8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

## **Mapping Correlation Benchmark**

Mapping	1-29%	30-59%	60-69%	70-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High
Matching: 67	Correlation: Very High			

## Course Structure for M.Sc. Chemistry (For the Candidates admitted from the Academic Year 2022-2023)

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
	DSC1	Discipline - Specific Core Course	PBCH1001	Inorganic Chemistry I	6	5	3	25	75	100
	DSC2	Discipline - Specific Core Course	PBCH1002	Organic Chemistry I	6	5	3	25	75	100
	DSC3	Discipline - Specific Core Course	PBCH1003	Physical Chemistry I	6	4	3	25	75	100
I	DSC4	Discipline Specific Core Pract.	PBCHPR11	Organic Chemistry Practical	6	4	6	25	75	100
	DSEI	Discipline- Specific Elective Course (To choose 1 out	PBCHDEP1 PBCHDEP2	Colorimetry and Kinetic Studies - Practical     Metal Ion Estimation and Complex preparation and Kinetic Studies- Practical	6	4	6	25	75	100
		of 3)	PBCHDE11	3. Applied Catalysis						
		D: : !:		TOTAL	30	22	-	125	375	500
	DSC5	Discipline - Specific Core Course	PBCH2001	Inorganic Chemistry II	5	5	3	25	75	100
	DSC6	Discipline - Specific Core Course	PBCH2002	Organic Chemistry II	6	5	3	25	75	100
	DSC7	Discipline - Specific Core Course	PBCH2003	Physical Chemistry II	6	4	3	25	75	100
П	DSC8	Discipline Specific Core Pract.	PBCHPR21	Physical Chemistry Practical	5	4	6	25	75	100
	VBCI	Value-Based Course	PBHR2001	Human Rights	2	-	3	25	75	100
		Discipline- Specific	PBCHDEP3	Analysis of Organic and     Inorganic Mixture-Practical	_					
	DSE2	Elective Course (To choose 1 out	PBCHDEP4	Semi Micro Inorganic and     Organic Qualitative     Analysis-Practical	6	4	6	25	75	100
		of 3)	PBCHDE21	3. Medicinal Chemistry						
		B		TOTAL	30	22	-	150	450	600
	DSC9	Discipline - Specific Core Course	PBCH3001	Inorganic Chemistry III	6	4	3	25	75	100
Ш	DSC10	Discipline - Specific Core Course	PBCH3002	Organic Chemistry III	6	4	3	25	75	100
	DSC11	Discipline - Specific Core Course	PBCH3003	Physical Chemistry III	5	4	3	25	75	100

	DSC12	Discipline Specific Core Pract.	PBCHPR31	Inorganic Chemistry Practical	5	4	6	25	75	100
	VBC1	Value-Based Course	PBCHVB31	Research Methodology & Ethics	3	3	3	25	75	100
		Discipline- Specific	PBCHDEP5	Conductometric Titration     and Organic Estimation -     Practical						
	DSE3	Elective Course (To choose 1 out	PBCHDEP6	Experimental methods in electrochemistry and estimation of Organic compounds-Practical	5	3	6	25	75	100
		of 3)	PBCHDEP7	3. Industrial Chemistry - Practical						
				TOTAL	30	22	-	150	450	600
	DSC13	Discipline - Specific Core Course	PBCH4001	Inorganic Chemistry IV	6	5	3	25	75	100
	DSC14	Discipline - Specific Core Course	PBCH4002	Organic Chemistry IV	6	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	PBCH4003	Physical Chemistry IV	5	4	3	25	75	100
IV	DSC16	Discipline - Specific Core Course	PBCHPR41	Preparation of Organic compounds and Spectral Interpretation - Practical	5	4	6	25	75	100
	OEC1	Other Elective Course (Pract.)	PBCHNMP4	Potentiometry and Spectral Interpretation -Practical	3	2	6	25	75	100
		Skil Ebhancement Course	PBCHPJ41	Project work, Research     Methodology and     Spectral Interpretation						
	SEC1	(Project) (To	PBCHPJ42	2. Industrial training, and Spectral Analysis	5	4	6	25	75	100
		of 3)	PBCHSEP8	3. Preparation of Domestic Products -Practical						
	VBC2	Value-Based Course	SWAYAM / O Bombay - MC	/ Online Spoken Tutorial by IIT MOOC@		1	-	-	-	-
				TOTAL	30	24	-	150	450	600
				GRAND TOTAL	120	90	-	575	1725	2300

<sup>@</sup> SWAYAM / Online Spoken Tutorial by IIT Bombay – MOOC is Mandatory for all PG programs and an additional one credit is taken for the calculation of the CGPA

## PROGRAMME SPECIFIC OUTCOMES (PSO) On completion of the M.Sc Chemistry Programme,

## By the end of the program, the students will be able to

PSO1	Orient the skill and knowledge in Computation and its applications in chemistry and handle the
1 301	suitable software for the subject and correlate it with experimental data.
PSO2	Apply the multi-dimensional aspects of chemistry and its applications in Material science,
F302	Molecular modelling, Drug discovery and Process Development.
PSO3	Utilize the basic knowledge of structure, reactivity, characterization and applications of chemicals
F303	in the development of novel chemical compounds.
PSO4	Handle the instruments employed in maintaining the quality and control of chemicals in the
F304	manufacturing process.
PSO5	Extract, elucidate the structure and synthesize natural products from the available sources
PSO6	Apply the knowledge of reactions and mechanisms in the synthesis of new chemicals, their
F300	analysis and applications.
PSO7	Carry out any kind of project in quality control, research and process development in the chemical
F301	industry, enhancing the job opportunities of the students.
PSO8	Communicate and work collaboratively with Technologists and Environmentalists leading to
7300	sustainable living.

### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program-				Progran	n Outco	mes (Po	Os)				
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	
PSO1	✓	✓	✓	✓	✓	✓	✓	✓			
PSO2	✓	✓	<b>√</b>	✓	✓	✓	✓	✓			
PSO3	✓	✓	<b>√</b>	✓	✓	✓	✓				
PSO4	✓	✓	✓	✓	✓	✓	✓				
PSO5	✓	✓	<b>√</b>	✓	✓	✓	<b>√</b>	✓			
PSO6	<b>√</b>	✓	✓	✓	<b>√</b>	✓	✓	✓			
PSO7	✓	✓	<b>√</b>	✓	✓	✓	✓			✓	
PSO8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Number of I	Number of matches = 64, Correlation: Very High										

## **Mapping Correlation Benchmark**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

# Course Structure for M.Sc. Biochemistry (For the Candidates admitted from the Academic Year 2022-2023)

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Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
	DSC1	Discipline - Specific Core Course	PBBI1001	Microbiology and Microbial Technology	6	5	3	25	75	100
	DSC2	Discipline - Specific Core Course	PBBI1002	Biomolecules	6	5	3	25	75	100
	DSC3	Discipline Specific Core Pract.	PBBIPR11	Practical – I Microbiology and Microbial Technology	6	4	6	25	75	100
I	DSC4	Discipline Specific Core Pract.	PBBIPR12	Practical II – Isolation and estimation of Biomolecules	6	4	6	25	75	100
		Discipline-Specific	PBBIDE11	1. Human Physiology						
	DSEI	Elective Course (To choose 1 out	PBBIDE12	2. Stem cell technology	6	4	3	25	75	100
		of 3)	PBBIDE13	3. Virology						
				TOTAL	30	22	-	125	375	500
	DSC5	Discipline - Specific Core Course	PBBI2001	Bioenergetics and Intermediary metabolism	5	5	3	25	75	100
	DSC6	Discipline - Specific Core Course	PBBI2002	Immunology & Immunotechnology	6	5	3	25	75	100
	DSC7	Discipline Specific Core Pract.	PBBIPR21	Practical – III Biochemical Analysis of Blood and Hematology	6	4	6	25	75	100
II	DSC8	Discipline Specific Core Pract.	PBBIPR22	Practical – IV Immunology & Immunotechnology	5	4	6	25	75	100
	VBCI	Value-Based Course	PBHR2001	Human Rights	2	-	3	25	75	100
		Discipline-Specific	PBBIDE21	Bio-analytical     Techniques						
	DSE2	Elective Course (To choose 1 out of 3)	PBBIDE22	Proteomics and Genomics	6	4	3	25	75	100
			PBBIDE23	3. Cancer Biology						
				TOTAL	30	22	-	150	450	600
	DSC9	Discipline - Specific Core Course	PBBI3001	Enzymology	6	4	3	25	75	100
	DSC10	Discipline - Specific Core Course	PBBI3002	Clinical Biochemistry	6	4	3	25	75	100
	DSC11	Discipline Specific Core Pract.	PBBIPR31	Practical – V Clinical Enzymology & Analysis of Urine	5	4	6	25	75	100
III	DSC12	Discipline Specific Core Pract.	PBBIPR41	Practical – VI Enzyme Assays	5	4	6	25	75	100
	VBC2	Value-Based Course	PBBIVB31	Research Methodology & Ethics	3	3	3	25	75	100
		Discipline-Specific	PBBIDE31	Ecology, Evolution and Biodiversity	_					
	DSE3	Elective Course (To choose 1 out of 3)	PBBIDE32 PBBIDE33	Plant Biochemistry     Animal Cell Culture	5	3	3	25	75	100
			1 DDIDE33	TOTAL	30	22	-	150	450	600
	DSC13	Discipline - Specific	PBBI4001	Genetics and Molecular	6	5	3	<b>150</b> 25	<b>450</b> 75	100
IV		Core Course		Biology Molecular						
1	DSC14	Discipline - Specific	PBBI4002	Holeculai	5	4	3	25	75	100

	Core Course		Endocrinology						
DSC15	Discipline Specific Core Pract.	PBBIPR41	Practical – VII Molecular Biology	5	4	6	25	75	100
SEC1	Skill Enhancement Course (Project)	PBBIPJ41	Project with Viva	5	4	6	25	75	100
OEC1	Other Elective Course	PBBINM41	Cell Signaling & Communication	4	2	3	25	75	100
	Discipline-Specific  Discipline-Specific  Discipline-Specific  Discipline-Specific  Discipline-Specific								
DSE4	Elective Course (To choose 1 out of 3)	PBBIDE42	2. Biostatistics and Bioinformatics	5	4	3	25	75	100
	choose i out of 3)	PBBIDE43	3. Pharmacology and Toxicology						
VBC2	Value-Based Course	SWAYAM / 0 IIT Bombay -	Online Spoken Tutorial by MOOC@	-	1	-	-	-	-
		TOTAL	TOTAL		24	-	150	450	600
		GRAND TOTAL		120	90	-	575	1725	2300

<sup>@</sup> SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all PG programs, and an additional one credit is taken for the calculation of CGPA

#### PROGRAM-SPECIFIC OUTCOME FOR MASTER OF BIOCHEMISTRY

#### **Knowledge Domain**

- **PSO1.** Outline the structure and metabolism of macromolecule and its regulation, and disorders of metabolic pathways.
- **PSO2**. Acquire knowledge of the molecular machinery of living cells, and their participation in molecular recognition and signalling.
- **POS3**. Acquire in-depth knowledge of Biochemistry, Microbiology, Plant Biochemistry, cell biology, toxicology, physiology, ecology and stem cell.
- **POS4.** Differentiate the principle, instrumentation and applications of different analytical techniques used in biochemistry, microbiology, biotechnology, Immunology and molecular biology and able to apply the scientific methods in the research investigation and hypothesis testing.

#### **Skill Domain**

- **POS5**. Measure and identify the concentration of analytes in the given sample by using biochemical, microbiological and molecular techniques and demonstrate independent and critical skills necessary to formulate specific experiments and obtain reproducible data.
- **POS6.** Make use of modern library research tools and software to locate and retrieve scientific information about techniques, bioinformatics, biostatics, genomics, and proteomics.
- **POS7**. Develop effective communication skills (oral and written) to represent the results of the experimental work and research, to pursue a career in academic and different life science industries (Pharmaceuticals, Biotech, research, Hospital and community services). Acquire lifelong

self-learning habits through online courses, and the ability to plan and manage projects to achieve the objective.

#### Value domain

**POS8**. Contribute to solving environmental issues and sustainable development and enhance personal integrity, human rights, women, children and labour rights and ethical behaviour when dealing with patients, Community members and the healthcare team.

## **Mapping PO Vs PSO**

	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	✓	✓								
PSO2	✓	✓								
PSO3	✓	✓								
PSO4	✓	✓	✓							
PSO5	✓		✓	✓		✓				
PSO6	✓		✓	✓	✓	✓		✓		
PSO7	✓				✓	✓	✓	✓		✓
PSO8					✓		✓		✓	✓

## Course Structure for M.Sc. Biotechnology (For the Candidates admitted from the Academic Year 2022-2023)

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
	DSC1	Discipline - Specific Core Course	PBBT1001	Microbiology and Microbial Technology	6	5	3	25	75	100
	DSC2	Discipline - Specific Core Course	PBBT1002	Functional Biochemistry	6	5	3	25	75	100
ı	DSC3	Discipline Specific Core Pract.	PBBTPR11	Practical - Microbiology and Microbial Technology	6	4	4	25	75	100
	DSC4	Discipline Specific Core Pract.	PBBTPR12	Practical – Functional Biochemistry	6	4	4	25	75	100
		Discipline-Specific	PBBTDE11	Human Physiology						
	DSEI	Elective Course (To	PBBTDE12	2. Stem Cell Technology	6	4	3	25	75	100
		choose 1 out of 3)	PBBTDE13	3. Virology						
				TOTAL	30	22	-	125	375	500
	DSC5	Discipline - Specific Core Course	PBBT2001	r - DNA Technology	5	5	3	25	75	100
	DSC6	Discipline - Specific Core Course	PBBT2002	Immunology and Immunotechnology	6	5	3	25	75	100
	DSC7	Discipline Specific Core Pract.	PBBTPR21	Practical - r- DNA Technology	6	4	4	25	75	100
II	DSC8	Discipline Specific Core Pract.	PBBTPR22	Practical - Immunology and Immunotechnology	5	4	4	25	75	100
	VBCI	Value-Based Course	PBHR2001	Human Rights	2	-	3	25	75	100
		Discipline-Specific	PBBTDE21	1. Bioanalytical Techniques	-					
	DSE2	Elective Course (To choose 1 out of 3)	PBBTDE22	2. Proteomics and Genomics	6	4	3	25	75	100
			PBBTDE23	3. Cancer Biology						
				TOTAL	30	22	-	150	450	600
	DSC9	Discipline - Specific Core Course	PBBT3001	Animal Cell Culture	6	4	3	25	75	100
	DSC10	Discipline - Specific Core Course	PBBT3002	Plant Molecular Biology	6	4	3	25	75	100
	DSC11	Discipline Specific Core Pract.	PBBTPR31	Practical - Animal Cell Culture	5	4	4	25	75	100
III	DSC12	Discipline Specific Core Pract.	PBBTPR32	Practical - Plant Molecular Biology	5	4	4	25	75	100
""	VBC2	Value-Based Course	PBBTVB31	Research Methodology & Ethics	3	3	3	25	75	100
		Discipline-Specific	PBBTDE31	Ecology, Evolution and Biodiversity						
	DSE3	Elective Course (To choose 1 out of 3)	PBBTDE32	2. Plant Biochemistry	5	3	3	25	75	100
			PBBTDE33	3. Biofertilizer Technology						
				TOTAL		22	-	150	450	600
IV	DSC13	Discipline - Specific Core Course	PBBT4001	Industrial Biotechnology	6	5	3	25	75	100
.,	DSC14	Discipline - Specific Core Course	PBBT4002	Medical Biotechnology	6	4	3	25	75	100

DSC15	Discipline Specific Core Pract.	PBBTPR41	Practical - Industrial Biotechnology and Medical Biotechnology	5	4	4	25	75	100
SEC1	Skill Enhancement Course (Project)	PBBTPJ41	Project with Viva	5	4	4	25	75	100
OEC1	Other Elective Course	PBBTNM41	Cell Signaling and Communication	3	2	3	25	75	100
		PBBTDE41	1. Nanobiotechnology						
DSE4	Discipline-Specific Elective Course (To choose 1 out of 3)	PBBTDE42	2. IPR, Biosafety and Ethics in Life Science	5	4	3	25	75	100
		PBBTDE43	3. Bioentrepreneurship						
VBC2	Value-Based Course	SWAYAM / Onl Bombay - MOC	ine Spoken Tutorial by IIT	-	1	-	-	-	-
			TOTAL	30	24	-	150	450	600
			GRAND TOTAL	120	90	-	575	1725	2300

SWAYAM / Online Spoken Tutorial by IIT Bombay – MOOCis Mandatory for all PG programs, and an additional one credit is taken for the calculation of CGPA

#### **PSOs for the M.Sc Biotechnology programme**

#### Upon completion of the M.Sc Biotechnology programme, the students will be able to:

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- **PSO 1:** Evolve with recent innovations and scientific updates in various thrust areas of biotechnology in accordance with the best scientific temperament, and professional and research ethics throughout life.
- **PSO 2:** Apply broad multidisciplinary knowledge and transferable skills in biotechnology and related subjects suitable for employment in the pharmaceutical and biotechnology industry, government research institutes or other agencies.
- **PSO3:** Contribute to innovative thinking, scientific approach, and problem-solving skills for various health, environmental, cultural and social issues through scientific knowledge.
- **PSO 4**: Recognize ethical issues in connection with recombinant DNA technology, gene cloning, animal manipulation, IPR, biosecurity and the management of sensitive experiments.
- **PSO 5:** Discriminate data beautification and data manipulation / scientific misconduct.
- **PSO 6**: Make use of ICT to carry out and deliver the research works and assignments independently and with a team of students across disciplines.
- **PSO 7:** Practice research & professional ethics as well as the responsibility of SOPs.
- **PSO8:** Evolve with recent innovations and scientific updates in the technological era in accordance with the best scientific temperament, and professional and research ethics throughout life.

## MAPPING OF PROGRAMME SPECIFIC OUTCOMES(M.Sc.) WITH PROGRAMME OUTCOMES

Programme			l	Progran	nme Oı	ıtcome	s (PO)				
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	
PSO1	✓	√	√		√	√	√	√	√	√	
PSO2	√	✓	√	√	√		√				
PSO3	✓	√	√	√	√	√	√		√	√	
PSO4	√	✓		√		√		√	√	√	
PSO5	✓		√	√	√	√		√			
PSO6	√		√		√	√	√	√			
PSO7			√	√			√		√	√	
PSO8	<b>√</b>	<b>√</b>			✓		√		✓	<b>√</b>	
	Number of matches = 54, Correlation: High										

## MAPPING CORRELATION BENCHMARK

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

# REGULATIONS M.Phil.DEGREE COURSES (FOR THE CANDIDATES ADMITTED FROM 2022-2023

#### **PREAMBLE**

Eminent scholars are of the unanimous opinion that there is an urgent need to improve the standards of research carried out in institutions of higher learning in India. Therefore, there is an urgent need for improving the standards of research by restructuring the research course curriculum. To avoid any element of duplication and subjective evaluation and other problems, some radical changes have to be brought about in research, leading to the award of the degree of Master of Philosophy.

#### **CBCS**

A choice-Based Credit System is a Flexible System of learning. Credit defines the quantum of contents/syllabi prescribed for a course and determines the number of hours of instruction required. It permits the students to:

- Choose electives from a wide range of elective courses offered by various departments of the College.
- Adopt an interdisciplinary approach to learning.
- Make the best use of the expertise of available faculty.

#### 1. ELIGIBILITY FOR ADMISSION

For securing admission to the M.Phil.program, candidates must have secured 55% of marks in the respective PG Degree program or any equivalent program in the case of inter-disciplinary subjects. However, the minimum marks for the SC/ST/differently-abled candidates would be 50%. For the part-time candidates, who have completed their PG Degree on or before 19th September 1991, the minimum eligible marks for admission to M.Phil.would be 50%. Teacher candidates working in universities / affiliated colleges/polytechnics/schools seeking admission to M.Phil.degree program on Part-Time basis should obtain **NO OBJECTION CERTIFICATE**, countersigned by the Director / Joint Director of Collegiate / School Education. Such candidates should have a minimum of TWO years of Teaching Experience and produce the Experience Certificate issued by the concerned Chief Educational Officer / Authorized authorities at the time of admission.

#### 2. ENTRANCE TEST AND INTERVIEW FOR ADMISSION

An entrance examination and interview would be conducted for all the registered applicants (full-time and part-time). The performance in the entrance examination and interview would be taken into account along with the marks secured in the PG program. The entrance examination for admission shall be conducted by the College / Department.

#### The selection criteria is based on the following:

Marks Secured in PG Degree (Max of 100 Marks)	50% of Marks secured in PG Degree (Max 50 Marks)	Marks in Written Entrance Examination (Max 40 Marks)	Marks in Interview / Oral Test (Max 10 Marks) C	Total Marks Secured (Max 100 Marks)
		В		A+B+C

For admission to the M.Phil.program, the candidates who have already qualified themselves in CSIR/ NET / JRF / SLET / SET are exempted from appearing in the Entrance Written Examination. However, the above-exempted candidates have to appear for an interview before the Selection Committee which will assess their aptitude for research. The syllabus for the entrance examination shall consist of research methodology and subject concerns.

### 3. SELECTION COMMITTEE

The selection committee would include the HOD and Research Guides of the department concerned.

#### 4. DURATION OF THE COURSE:

The duration for completion of the M.Phil. (Full-time) program in any discipline is two semesters and the maximum period is 2 years. For M.Phil. (Part-time), the duration is two years and the maximum period is 3 years. If a candidate fails to complete the course within the stipulated period, the candidate has to re-register for the course as per the Thiruvalluvar University regulations in force at that time. The M.Phil.The degree is awarded if a student has registered, undergone and secured the required minimum number of credits for the core and elective subjects including the Dissertation specified in the corresponding program within the stipulated time; Secured the required attendance; No

dues to the College, Laboratory, Hostel and Library; are the other conditions applicable for the issue of course completion and transfer certificates.

#### 5. STRUCTURE OF THE PROGRAMME

The M.Phil program consists of (a) Core courses which are mandatory for all students and (b) Elective courses related to the Research Area/work.

- I. Core Course: Three Courses (Core I, II & III) carrying 5 credits each
- II. **Elective Course**: One Course (Elective I) carrying 5 credits (related to the Research Area)
- III. **Dissertation:** 20 Credits (relevant to the Elective I Course)

The total number of credits for core and electives shall be 40 consisting of 3 Core courses (15 credits) and one elective (5 Credits) and a Dissertation (20 credits)

#### 6. EXAMINATION OF THEORY PAPERS

For full-time scholars, a theory examination will be conducted at the end of the first semester and submission of the dissertation will be at the end of the second semester. For part-time scholars, a theory examination will be conducted at the end of the first year and submission of the dissertation will be at the end of the second year.

#### 7. RESEARCH TOPIC

The research topic for the dissertation has to be finalized at the beginning of the M.Phil. Full-Time Programme, so that the collection of relevant literature and research design shall be completed in the first semester leaving the entire second Semester for the research work and preparation of the dissertation. For M.Phil. Part-Time Programme, the collection of relevant literature and research design could be completed in the first year leaving the entire second year for the research work and preparation of the dissertation. The candidates should register for M.Phil. Course with Thiruvalluvar University in the first semester itself by using a separate registration form to be obtained from Thiruvalluvar University soon after admission. The academic year for the M.Phil. The program starts from August to July every year.

#### 8. MINIMUM REQUIREMENT FOR SUBMISSION OF DISSERTATION

For submission of the dissertation, M.Phil. (both Full Time and Part-Time) scholars should have cleared all three written examination papers and presented their respective research work before the Departmental Research Committee for approval. A research scholar shall appear before the Research Advisory Committee once in six months to make a presentation of the progress of his work for evaluation and further guidance.

The six-monthly progress reports shall be submitted by the Research Advisory Committee to the Head of the Department concerned with a copy to the research scholar. Prior to the submission of the dissertation/thesis, the scholar shall make a presentation in the Department before the Research Advisory Committee of the Institution concerned which shall also be open to all faculty members and other research scholars.

The feedback and comments obtained from them may be suitably incorporated into the draft dissertation/thesis in consultation with the Research Advisory Committee. M.Phil. scholars shall publish one research article in referred journal or present at least one (1) research paper in a conference/seminar proceedings/ college research journal, before the submission of the dissertation/thesis for adjudication and produce evidence for the same in the form of presentation certificates and/or reprints.

The last date for submission of the Dissertation shall be 31st August of every year. Those who do not submit the dissertation in time may be given an extension of a maximum of one month with a late fee prescribed by the governing body from time to time (i.e. up to 30th September). Any student failing to submit the dissertation within this period will be permitted to submit the dissertation only in the next academic year along with the subsequent batch of students.

For the change of M.Phil.dissertation title, if needed, a separate application should be submitted at least 15 days prior to the last date for regular submission of the dissertation with the prescribed fee.

#### 9. EVALUATION

The process of evaluation, examination, etc. for M.Philprogram shall be as per the UGC's regulations, 2016 which is as follows:

An M.Phil. Scholar has to obtain a minimum of 55% of marks (or an equivalent grade/CGPA in a point scale wherever the grading system is followed) in the course work in order to be eligible to continue in the program and submit the dissertation/thesis.

However, final-semester students of the M.Phil.Programs are permitted to appear in any arrear paper during the subsequent examinations. Regarding the evaluation of the M.Phil.dissertation, the total mark is 200. It is divided into 150 marks for dissertation evaluation and 50 marks for the viva-voce examination. The earmarked mark for the dissertation has to be divided equally between the internal examiner (guide) and the external examiner (75 marks each). The viva-voce examination has to be conducted by both internal and external examiners jointly.

The Core course (Core I, Core II and Core III) will be evaluated by the External Examiners who have approved research guides of the central / state universities and Elective course I by the respective supervisor.

The dissertation shall be jointly evaluated by the supervisor and the external examiner. The external examiner is to be drawn from the affiliating University department or any affiliated college offering M.Phil. degree course in the respective discipline in the Thiruvalluvar University area. However, the examiner should not be from the same college.

The distribution of marks shall be as under:

- 75% marks for the Dissertation Valuation
- 25% marks for Viva-voce

#### 10. OTHER REGULATIONS OF M.PHIL. PROGRAM

The rules and regulations concerning course registration, grading system, attendance and discipline of students of the M.Phil Full Time Programme shall be the same as for the Master's Programme. For the M.Phil Part-Time Programme, the research scholar should attend the course as per the Thiruvalluvar University regulations.

#### 11. GRADING SYSTEM

The marks earned by a candidate in the Internal Assessment and End Semester Examinations for each of the courses will be added. The marks thus obtained will then be converted into Letter Grades and Grade points as per the details given below:

Range of Marks	Letter Grade	Grade Points
96 – 100	0	10
86 – 95	A+	9
76 – 85	Α	8
66 – 75	B+	7
55 – 65	В	6
00 – 54	F	0
Absent	Ab	0

#### Illustration of SGPA

Semester			Grade Letter	Grade Point	Credit Point [Credit x Grade]
	Course 1	5	A +	0	45
I	Course 2	5	Α	8	40
	Course 3	5	0	10	50
	Course 4	5	В	6	30
	Total	20			165
П	Dissertation	20	B +	7	140

$$SGPA = \frac{165}{20} = 8.25$$

$$CGPA = \frac{165 + 140}{40} = \frac{305}{40} = 7.6$$

#### 13. CLASSIFICATION OF SUCCESSFUL CANDIDATES

Passed all the courses with **CGPA of 7.5** and - First Class with distinction above without any arrear

Passed all the courses with CGPA of 6-7.4 - First Class

Passed all the courses with CGPA of 5.5-5.9 - Second Class

#### 14. THE MEDIUM OF INSTRUCTION AND EXAMINATIONS

The medium of instruction and Question Paper shall be in English.

#### 15. SELF-SUPPORTIVE COURSES

The above Regulations shall be applicable to candidates undergoing the respective self-supportive courses also.

#### **16. RANK HOLDERS**

The students who secure the highest marks in aggregate of all the subjects in the first attempt of the autonomous examinations will be the Rank holders. This is applicable to all UG/PG/ M.Phil. programs of our College. The Rank Holder will be awarded with a certificate and prize.

#### 17. TRANSITORY PROVISION

Candidates who have joined the program from the academic year 2020-21 will be permitted to appear for the examinations under this Regulation for a maximum period of TWO years for Full-Time (FT) and THREE years for Part-Time (PT) candidates. Thereafter, they will be permitted to appear for the examinations only under the new Regulations in force. Such candidates have to reregister for the course. The fee for such re-registration will be as decided by the Governing Body from time to time.

#### 18. PLAGIARISM CHECK CERTIFICATE

Candidates who have been admitted from the academic year 2019-20 have to submit a Plagiarism check Certificate and one research article in any refereed journal along with their dissertation submission. The permissible limit of plagiarism is 20%.

#### 19. QUESTION PAPER PATTERN

Part A	To answer ALL the 5	5 x 6 =
	Questions	30 Marks
	(Either or Type)	
	One Question from each UNIT	
Part B	To answer 3 Questions	3 x15 =
	(out of 5 questions)	45 Marks
	One Question from each UNIT	
TOTAL		75 Marks

### **RESEARCH ACTIVITIES OF THE COLLEGE**

## MINI PROJECT:

## UGC Autonomous Grant 2022-2023 – Development of Area Study Programme – Sanction and Release of Grant

S. No	Principal Investigator	Co-Investigator	Title of the Mini Project	Amount
1	Dr. S. Thameemul Ansari Assistant Professor of Commerce, Islamiah College (Autonomous), Vaniyambadi	Dr. A. Khaleequzzamani Assistant Professor of Commerce, Islamiah College (Autonomous), Vaniyambadi	The Role of Banks in Promoting Start –Ups (A Study with Reference to Tirupattur District)	25,000/-
2	Dr. N. Nadeem Afroze Assistant Professor, PG & Research Department of Chemistry, Islamiah College(Autonomous), Vaniyambadi	Dr. F. Liakath Ali Khan Associate Professor of Physics PG & Research Department of Physics, Islamiah College(Autonomous), Vaniyambadi	Recycling of Paper into a Product	25,000/-

## CENTRAL COUNCIL FOR RESEARCH UNANI MEDICINE, MINISTRY AYUSH, GOVERNMENT OF INDIA

## Approval of the Director General, CCRUM, New Delhi - Sanction and Release of Grant

S. No.	Principal Investigator	Title of the Project	Amount
NO.			Sanctioned
1	Dr. M.P. Ashar Waheed Assistant Professor of Biochemistry Islamiah College (Autonomous), Vaniyambadi	Exploring the Anti-inflammatory Mechanism of Actionof Specific Unani Formulation	11,25,000/-

# ISLAMIAH COLLEGE (AUTONOMOUS) COURSE STRUCTURE FOR M.Phil PROGRAMMES (CBCS PATTERN)

(For the Candidates admitted from the academic year 2022 –2023)

#### COURSE STRUCTURE FOR M. Phil. MATHEMATICS MAX MARKS HRS./ WEEK EXAM HRS. CREDIT SEM COURSE **EXAM COURSE COURSE TITLE** TOTAL CODE ⋖ Discipline Specific 100 MPHBMS01 Algebra and Analysis 5 5 3 25 75 Course Discipline Topology and MPHBMS02 Specific 5 5 3 25 75 100 differential Equations Course Discipline Research and Specific 5 5 3 25 75 100 MPHBCC03 **Publication Ethics** Course (To choose 1 I out of 4) 1. Probability Models and Discipline **Applications** Specific 2. Banach Algebra Elective MPHBMS04 5 5 3 100 25 75 3. Fuzzy Sets and Course their Applications 4. Lie groups and Ordinary Differential **Equations** Dissertation (To be Choosen According to Ш MPHBMS05 Dissertation 150 150 20 **Discipline Specific Elective Course)** Viva-Voce 50 50 TOTAL 100 500 600 40

		COURSI	E STRUCTURE FOR M.	Phil. I	PHYSI	cs			
	E COURSE CODE			Ä			M	AX MAF	RKS
SEM		COURSE	COURSE TITLE	INS HRS./ WEEK	CREDIT	EXAM HRS.	ΑI	EXAM	TOTAL
	MPHBPY01	Discipline Specific Course I	Research Methodology	5	5	3	25	75	100
	MPHBPY02	Discipline Specific Course II	Advanced Physics	5	5	3	25	75	100
	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
I	МРНВРҮ04	Discipline Specific Elective Course	(To choose 1 out of 4)  1. Applied    Spectroscopy &    Molecular    Dynamics  2. Applied    Spectroscopy &    Chemical Physics  3. Physics of Thin    films and Nano-    Materials  4. Nano    Luminescence	5	5	3	25	75	100
II	МРНВРҮ05	Dissertation	Dissertation (To be Choosen According to Discipline Specific Elective Course)	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
	TOTAL				40	-	100	500	600

		COURSE	STRUCTURE FOR M. Phil	I. CHE	EMIST	RY			
				EK	L	SS.	M	AX MAI	RKS
SEM	COURSE CODE	COURSE	COURSE TITLE	HRS./ WEEK	CREDIT	EXAM HRS.	₹	EXAM	TOTAL
	MPHBCH01	Discipline Specific Course I	Research Methodology	5	5	3	25	75	100
	MPHBCH02	Discipline Specific Course II	Advanced Chemical Analysis	5	5	3	25	75	100
	МРНВСС03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
I	MPHBCH04	Discipline Specific Elective Course	(To choose 1 out of 5)  1.Polymer and advanced organic Chemistry  2. Oxidation and reduction reaction in organic Chemistry  3. Computational Chemistry  4. Kinetic studies of co-ordination complexes  5. Polymer synthesis and characterization.	5	5	3	25	75	100
11	MPHBCH05	Dissertation	Dissertation (To be Choosen According to Discipline Specific Elective Course)	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
	TOTAL					-	100	500	600

		COURSE	STRUCTURE FOR M. Phil. E	вюсн	EMIST	RY			
				×			MA	X MAR	KS
SEM	COURSE CODE	COURSE	COURSE TITLE	HRS./ WEEK	CREDIT	EXAM HRS.	ΑI	EXAM	TOTAL
	MPHBBI01	Discipline Specific Course I	Research Methodology	5	5	3	25	75	100
	MPHBBI02	Discipline Specific Course II	Analytical Methods	5	5	3	25	75	100
I	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
	MPHBBI04	Discipline Specific Elective Course	(To choose 1 out of 2) 1. Genetics and Molecular Biology 2. Diagnostics in the control of disease	5	5	3	25	75	100
II	MPHBBI05	Dissertation	Dissertation (To be Chosen According to Discipline Specific Elective Course)	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
		TOTA	L	-	40	-	100	500	600

		COURSE STR	RUCTURE FOR M. Phil. B	IOTEC	CHNOI	LOGY	,		
	COURSE CODE			×		<i>(</i> 6	M	AX MA	RKS
SEM		COURSE	COURSE TITLE	HRS./ WEEK	CREDIT	EXAM HRS.	₹	EXAM	TOTAL
	MPHBBT01	Discipline Specific Course I	Research Methodology	5	5	3	25	75	100
	MPHBBT02	Discipline Specific Course II	Advanced Biotechnology	5	5	3	25	75	100
	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
	MPHBBT04	Discipline Specific Elective Course	(To choose 1 out of 4)  1. Bioprospecting     Technology  2. Plant     Biotechnology  3. Aquaculture     Biotechnology  4. Microbial     Biotechnology	5	5	3	25	75	100
II	МРНВВТ05	Dissertation	Dissertation (To be Chosen According to Discipline Specific Elective Course)	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
		TOTAL		-	40	_	100	500	600

	C	OURSE STRU	JCTURE FOR M. Phil. C	COMPL	JTER \$	SCIE	NCE		
				×		S.	MA	X MAF	RKS
SEM	COURSE CODE	COURSE	COURSE TITLE	HRS./ WEEK	CREDIT	EXAM HR	ΑI	EXAM	TOTAL
	MPHBCS01	Discipline Specific Course I	Research Methodology	5	5	3	25	75	100
	MPHBCS02	Discipline Specific Course II	Computer Graphics and Image Processing	5	5	3	25	75	100
	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
I	MPHBCS04	Discipline Specific Elective Course	(To choose 1 out of 5)  1. Data Mining & Data Warehousing & Business Intelligence 2. Wireless Networking & Pervasive Computing 3. Information & Cyber Security 4. Cloud Computing & Virtualization 5. Big Data Analytics	5	5	3	25	75	100
II	MPHBCS05	Dissertation	Dissertation (To be Chosen According to Discipline Specific Elective Course)	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
		TOTAL		-	40	-	100	500	600

		COURSI	E STRUCTURE FOR M.	Phil. I	нѕто	RY			
				7		S.	MA	X MAF	RKS
SEM	COURSE CODE	COURSE	COURSE TITLE	INS HRS./ WEEK	CREDIT	EXAM HRS.	ΑI	EXAM	TOTAL
	MPHBHI01	Discipline Specific Course I	Research Methodology	5	5	3	25	75	100
	MPHBHI02	Discipline Specific Course II	Historiography	5	5	3	25	75	100
I	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
	МРНВНІ04	Discipline Specific Elective Course	Main Currents in the 20 <sup>th</sup> Century Tamil Nadu	5	5	3	25	75	100
11	МРНВНІ05	Dissertation	Dissertation (To be Chosen According to Discipline Specific Elective Course)	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
	TOTAL					-	100	500	600

		COURSE	STRUCTURE FOR M. P	hil. Co	ОММЕ	RCE			
				X			M	AX MA	RKS
SEM	COURSE CODE	COURSE	COURSE TITLE	INS HRS/ WEEK	CREDIT	EXAM HRS	ΨI	EXAM	TOTAL
	MPHBCO01	Discipline Specific Course I	Research Methodology	5	5	3	25	75	100
	MPHBCO02	Discipline Specific Course II	Data Analyses & SPSS	5	5	3	25	75	100
1	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
	МРНВСО04	Discipline Specific Elective Course	(To choose 1 out of 3) Organizational Behaviour Consumer Behaviour Marketing Management	5	5	3	25	75	100
II	MPHBCO05	Dissertation	Dissertation (To be Chosen According to Discipline Specific Elective Course)	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
		TOTAL		-	40	-	100	500	600

## **General: (Applicable to ALL Programmes)**

Any other guidelines required for the above-said Programmes, the Department / Candidate has to follow the Thiruvalluvar University regulations in force at that time or seek clarification from the Principal.

However, any issue may be given suitable relaxation/ modification by the Principal on the recommendation of the Board of Studies / Board of Research/ RDC / CDC based on the merit of the individual case, if it is justified with relevant documents.

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# REGULATIONS Value-Added SKILL DEVELOPMENT Certificate Courses (For the Candidates admitted from the academic year 2022 –2023)

#### 1. ELIGIBILITY FOR ADMISSION

A candidate who has passed the higher secondary examination and joined in any degree course in this College is eligible to undergo Certificate Programmes.

#### 2. DURATION OF THE COURSE

The certificate course is for a period of one to three months. The course subject and practicals will be conducted beyond the working hours of the College.

#### 3. COURSE OF STUDY

This Programme is envisaged to provide flexibility in choosing the combination of subjects without any limitation, identifying the local need-based subjects, entering the job market with gained skills in the respective discipline. The course of study consists of theory papers, Practical/Project/fieldwork

#### 4. SCHEME OF EXAMINATION

Srl. No	Course Code	Course Title	Duration of the Course (Month)	Exam. Hrs.	Credits	Marks
1	UBMSCC01	Certificate Course in 'Bio-Statistics'	3	3	3	100
2	UBPYCC01	Certificate Course in 'Basic Electronics and Servicing of Home Appliances	3	3	3	100
3	UBCHCC01	Certificate Course in 'Preparation of Domestic Products'	3	3	3	100
4	UBCHCC02	Certificate Course in 'Testing and Analysis of Industrial Products'	3	3	3	100
5	UBCHCC03	Certificate Course in 'Domestic and Laboratory Discharge water treatment method and process'	3	3	3	100
6	UBBICC01	Hands-on Training in 'Mushroom Cultivation'	3	3	3	100
7	UBBTCC01	Certificate Course on 'Herbal Medicines'	3	3	3	100

8		Certificate Course in 'Web				100
0	UBCSCC01	Designing'	3	3	3	100
9	UBUACC01	Certificate Course in 'Arabic' offered by NCPUL	3	3	3	100
10	UBENCC01	Certificate Course in 'Spoken English'	3	3	3	100
11	UBENCC02	Certificate Course in English for Budding Entrepreneurs"	Five Week - online		100	
12	UBHICC01	Certificate Course in 'Tourism & Travel Management	3	3	3	100
13	UBCOCC01	UGC Sponsored Certificate Course in 'E-Commerce & Footwear Technology	12	3	5	100
14	UBCOCC02	Certificate Course in 'Business Computer Applications	3	3	3	100
15	UBFACC01	Certificate Course in 'Accounting Technician' offered by ICAI	3	3	3	100
16	UBBACC01	Certificate Course in 'Stress Management Skills	3	3	3	100
17	UBCACC01	Certificate Course in 'Online Trading of Securities	3	3	3	100
18	UBBTCC02	Certificate Course in Ornamental Fish Culture	3	3	3	100
19	UBCSCC01	Certificate Course in "PC Assembly & Maintenance"	3	3	3	100
20	UBCSCC02	Certificate Course in Network Administration	3	3	3	100

#### 5. REQUIREMENTS TO TAKE THE EXAMINATION:

A candidate shall be permitted to take the examination provided he secures 75% attendance in both theory and practical classes and must complete the project work as prescribed

### 6. PRACTICAL/PROJECT

Practical classes shall be designed in such a manner that a student acquires practical knowledge in handling, managing and practising the tools, materials and equipment relating to the certificate courses. Project work will consist of an assignment in the subject area. Topics will be selected by the student and approved by the program coordinator.

#### 7. MEDIUM OF INSTRUCTION

The medium of instruction and examination shall be English only.

#### 8. PASSING MINIMUM

A candidate shall be declared to have passed the paper if he obtains a minimum of 40% of 100 marks (Theory + Practical/Projects).

Course	Maximum Marks
Theory	75
Practical/Project	25
Total	100

### **8. QUESTION PAPER PATTERN:**

## Question paper pattern for the course shall be as follows:

Section – A 10 Questions without the choice of 2 marks each (10×2=20)

Section – B 5 out of 8 questions – 5 marks each  $(5 \times 5 = 25)$ 

Section – C 3 out of 5 questions – 10 marks each  $(3\times10=30)$ 

# REGULATIONS FOR UNIVERSITY GRANTS COMMISSION SPONSORED CAREER-ORIENTED CERTIFICATE COURSE IN E-COMMERCE & FOOTWEAR TECHNOLOGY

Semester System with Credits with effect from the year 2013 – 2014 onwards

#### **ELIGIBILITY FOR ADMISSION:**

Any student of the second and third-year undergraduate course

#### **DURATION OF THE COURSE:**

One academic year comprising ninety working days spread over two semesters of forty-five days each. Each semester shall have 120 hours out of which 90 hours shall be for theory classes and 10 hours each shall be allocated for practical classes, project work, and fieldwork.

#### THE COURSE OF THE STUDY

The course of study shall be under a semester pattern with credits. The course consists of one core paper, practical classes, project work, and fieldwork.

#### **REQUIREMENTS TO TAKE THE EXAMINATION:**

A candidate shall be permitted to take the examination provided they secure 75% attendance in both theory and practical classes and must complete project work and fieldwork as prescribed.

#### PRACTICAL CLASSES:

Practical classes shall be designed in such a manner that a student acquires practical knowledge in handling, managing, and practising the tools and equipment relating to the orientation courses.

#### **PROJECT WORK:**

Project work will consist of small assignments in the subject area. Topics will be selected by the students and approved by the faculty.

#### FIELDWORK:

Fieldwork consists of industrial visits and observations designed to gain firsthand knowledge of the subject. It will be done either individually or in groups.

#### **MEDIUM OF INSTRUCTION AND EXAMINATION:**

The medium of instruction and examination of the candidate shall be English.

#### **MINIMUM PASS MARKS:**

A candidate shall be declared to have passed the paper if he obtains a minimum of 40 marks i.e. 25 from theory and 15 from practical and project work. The maximum and minimum marks for the course shall be as follows:

Course	Maximum Marks	Minimum Marks
Theory	75	25
Practical	10	
Project	10	15
Field Visits	5	
Total	100	40

#### **QUESTION PAPER PATTERN:**

Question paper pattern for the course shall be as follows:

**Section – A** [10 Questions without the choice of 2 marks each (10X2=20)]

**Section – B** [5 out of 8 questions – 5 marks each (5X5=25)]

Section – C [3 out of 5 questions – 10 marks each (3X10=30)]

DEPARTMENT OF COMMERCE (FINANCE & ACCOUNTS)
REGULATION FOR CAREER ORIENTED CERTIFICATE COURSE IN
ACCOUNTING TECHNICIAN

ABOUT THE COURSE

Career Oriented Certificate in Accounting Technician Course (CAT) Conducted by the Department of Commerce (Finance & Accounts) with the Collaboration of the Institute of Cost Accountants of India (ICAI), New Delhi.

ELIGIBILITY CRITERIA

A student who has passed the Class 10 examination conducted by an examining body constituted by the law of India or an examination recognized by the Central Government / State Government as equivalent thereto may register for the CAT Course and simultaneously study and appear for the Senior Secondary (10+2) Examination.

(Or)

Passed the Senior Secondary School Examination under the 10+2 scheme of a recognized Board or an Examination recognized by the Central Government as equivalent thereto or has passed the National Diploma in Commerce Examination or any State Board of Technical Education under the authority of the said All India Council (AIC), or the Diploma in Rural Service Examination conducted by the National Council of Higher Education.

**Duration of the Course** 

CAT – Foundation Course (Entry-level) Part-I-200 Hours of Coaching and Self-Assessment – online/offline.

Duration of CAT-Competency Level – Part –II-100 Hours of Computer Training, Training on the filing of Returns, Cost Sheet preparation, and self-assessment – online/offline

SUMMARY OF THE COURSE

Foundation Course (Entry Level) Part-I

Paper 1: Fundamentals of Financial Accounting

Paper 2: Applied Business and Industrial Laws

Paper 3: Financial Accounting - II

Paper 4: Statutory Compliance

#### Competency Level - Part - II

Fundamentals of Computers
Filling of Statutory Returns
Introduction top Costing principles and Preparation of Cost Statements
5 – days Orientation Programme

#### The pattern of the CATExamination/Assessment Test

#### Examination Pattern for Foundation Course (Entry Level) Part -I

The examination shall have Multiple Choice Questions to be answered online. The Examination of Foundation Course (Entry Level) Part- I shall be held on a single day in two sessions, Forenoon and Afternoon. The details of the papers covered in both the session would be:

#### PAPER I (100 MARKS)

Section A: Fundamentals of Financial Accounting (60 Marks)

Section B: Applied Business and Industrial Laws (40 Marks)

Total Questions: 100 (Multiple Choice Questions)

Maximum Marks: 100 (Each Question will carry 1 Mark)

There will be no negative marking for wrong answers

#### PAPER II (100 MARKS)

Section A: Financial Accounting- II (50 Marks)

Section B: Statutory Compliance (50 Marks)

Total Questions: 100 (Multiple Choice Questions)

Maximum Marks: 100 (Each Question will carry 1 Mark)

There will be no negative marking for wrong answers

#### STANDARD OF PASSING

A candidate of the Foundation Course (Entry Level) Part- I Examination shall be declared to have passed the Examination if secures a minimum of 40% marks in each paper and an aggregate of 50% of total marks in the Foundation Course (Entry Level) part-I Examination.

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### ISLAMIAH COLLEGE (AUTONOMOUS) VANIYAMBADI



# ANNEXURE TO THE REGULATIONS & SCHEMES VOL. XVI

FOLLOWING THE INSTRUCTIONS FROM DEPARTMENT OF HIGHER EDUCATION, GOVERNMENT OF TAMILNADU, TO INTRODUCE LANGUAGES MANDATORILY FOR ALL UG DEGREE PROGRAMMES, COURSE STRUCTURE FOR B.COM., B.COM. (C.A.), B.COM. (F&A),

B.B.A, B.C.A WERE REVISED AS FOLLOWING AND APPROVED BY THE MEMBERS IN THE XVIII MEETING ACADEMIC COUNCIL

## ISLAMIAH COLLEGE (AUTONOMOUS) COURSE STRUCTURE FOR UG PROGRAMMES (CBCS PATTERN)

(For Students admitted from 2022 – 2023)

#### PROGRAMME OUTCOMES FOR BACHELOR OF BUSINESS ADMINISTRATION

At the end of the BBA Programme, the students will be able to

- **PO1** Communicate ideas, thoughts and Knowledge through English effectively with individuals, groups, and businesses using Verbal, Non-Verbal, and Digital modes of Communication. Develop linguistic skills in one Indian/Regional language.
- **PO2** Demonstrate Knowledge of the concepts, principles, theories, and techniques related to various forms, facets, and functions of Business.
- **PO3** Synthesize learned Knowledge and acquired skills to establish, organize, manage and develop a business/organization effectively and efficiently in the capacity of an entrepreneur, businessman, or any other professional.
- **PO4** Critically evaluate a problem/environment and make informed business decisions to solve problems.
- PO5 Exhibit potential to accomplish tasks independently or as a member or leader of a team.
- **PO6** Use Computers, Software, the Internet, and other ICT tools to maximize resource utilization and increase efficiency in day-to-day business operations.
- **PO7** Plan, execute, and manage a Project after careful appraisal.
- **PO8** Develop products, Frame Policies, and collaborate to help Society increase living standards and towards building a Sustainable Environment.
- **PO9** Discover a passion for Lifelong Learning through MOOCs, ODL, and Self-learning techniques through the optimum use of ICT.
- PO10 Identify and assess various issues in the Environment and suggest measures to overcome them. Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future

Category   Code   Course Title   Course Title Title   Course Title Title   Course Title Title Title Title   Course Title Title Title Title		COURSE STRUCTURE FOR BUSINESS ADMINISTRATION [B.B.A] (For the candidates admitted from the academic year 2022-2023)												
Generic Elective	Semester	Part	Category		Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL			
GE1			Generic Flective	UBFUR101	Urdu I									
OBSTRICT   Course		GE1		UBFAR101	Arabic I	6	5	3	25	75	100			
GE2   Generic Elective   UBFEN101   English		GLI	out UBFHD101 Hindi I		Hindi I		3	3	25	75	100			
AEC1			01 4)	UBFTA101	Tamil I									
AEC1		GE2		UBFEN101	English I	4	4	3	25	75	100			
DSC1   Specific Core   Course   UBBA1001   (B.Com, B.Com, CA, B.Com, F   7   6   3   25   75		AEC1	Enhancement	UBVED101	Value Education*	2	1	3	25	75	100			
SEC1   Enhancement Course   UBSKB102   Communication for Commerce and Management**   3   3   3   25   75	I	DSC1	Specific Core	UBBA1001	(B.Com, B.Com.CA, B.Com. F &A, BBA)	7	6	3	25	75	100			
Course   UBBAALTI   Allied - Business Statistics   7   5   3   25   75		SEC1 Enhancement Course		UBSKB102	Communication for Commerce and	3	3	3	25	75	100			
Course (To choose 1 out of 2)[Online Exam]		OEC1	Course	UBBAAL11	Allied - Business Statistics	7	5	3	25	75	100			
Course   C		VBC1		UBVBC101	1. Moral Education#									
Company   Comp			(To choose 1 out of 2)[Online	UBVBC102		1	1	1	-	25	25			
Search   Generic Elective (To choose 1 out of 4)   UBFAR201   Hindi II   UBFHD201   Hindi II   UBFHD201   Tamil II   GE4   Generic Elective   UBFEN201   English II   4   4   4   3   25   75   Ability   Enhancement Course   UBENV201   Environmental Studies*   2   1   3   25   75   75   25   25   25   26   26   26   26   2					TOTAL	30	25	-	150	475	625			
GE3				UBFUR201	Urdu II		5			75				
II		050		UBFAR201	Arabic II	]			25		400			
II		GE3	`	UBFHD201	Hindi II	6		3	25	/5	100			
AEC2			,	UBFTA201	Tamil II									
II		GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100			
DSC2   Specific Core   Course   Specific Core   Course   Discipline - Specific Core   Course   Specific Core   Specific Cor		AEC2	Enhancement	UBENV201	Environmental Studies*	2	1	3	25	75	100			
DSC3         Specific Core Course         UBBA2002         (B.Com, B.Com.CA, B.Com.CA, B.Com.CA, B.Com.F&A, BBA)         4         3         3         25         75           OEC2         Other Elective Course         UBBAAL21         Allied - Operations Research         4         4         3         25         75           OEC3         Other Elective Course         UBBAAL22         Allied - Consumer Behaviour         4         3         3         25         75           Value-Based Course         UBVBC201         1. Physical Education - Sports I#         1         1         1         1         -         25	П	DSC2	Specific Core	UBBA2001	Business Environment	5	4	3	25	75	100			
OEC2         Course         UBBAAL21         Research         4         4         3         25         75           OEC3         Other Elective Course         UBBAAL22         Allied - Consumer Behaviour         4         3         3         25         75           Value-Based Course         UBVBC201         1. Physical Education - Sports I#         1         1         1         1         1         -         25		DSC3	Specific Core	UBBA2002	(B.Com, B.Com.CA,	4	3	3	25	75	100			
Course		OEC2		UBBAAL21		4	4	3	25	75	100			
VBC2   Course   OBVBC201   Sports I#		OEC3	Course	UBBAAL22	Behaviour	4	3	3	25	75	100			
		VBC2	Course (To choose 1 out	UBVBC201	Physical Education -     Sports I#      Health & Wellness#	1	1	1	-	25	25			
of 2) TOTAL 30 25 - 175 550			of 2)		TOTAL	30	25	_	175	550	725			

	GE5		UBFUR301	Urdu III						
	GF5	Generic Elective (To choose 1 out	UBFAR301	Arabic III	4	4	3	25	75	100
	GLJ	of 4)	UBFHD301	Hindi III	•	•	3	23	73	100
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	4	3	25	75	100
			UBTANM31	Ithazhiyal I						
			UBURNM31	Basic Urdu I	1					
	OEC4	Non-Major	UBHDNM31	Basic Hindi I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
	DSC4	Discipline - Specific Core Course	UBBA3001	Strategic Management	5	5	3	25	75	100
Ш	DSC5	Discipline - Specific Core Course	UBBA3003	Modern Marketing	4	3	3	25	75	100
	OEC5	Other Elective	UBBAAL31	Allied – Business Economics	4	3	3	25	75	100
	0200	Course	UBBAAP31	Allied - Tally Basics - Lab	4	3	3	25	75	100
		Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#	1	1	1			
	VBC3	(To choose 1 out of 2)  UBVBC302  2. Physical Education – Sports II*  TOTAL						-	25	25
				TOTAL	30	25	-	175	550	725
			UBFUR401	Urdu IV						
	GE7	Generic Elective (To choose 1 out	UBFAR401	Arabic IV	4	4	3	25	75	100
	027	of 4)	UBFHD401	Hindi IV		-				
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	4	3	25	75	100
			UBTANM41	Ithazhiyal II						
	OEC6	Non-Major	UBURNM41	Basic Urdu II	2	1	3	25	75	100
	OLCO	Non-major	UBHDNM41	Basic Hindi II		'	ľ		''	100
			UBARNM41	Basic Arabic II						
IV	DSC6	Discipline - Specific Core Course	UBBA4001	Production & Materials Management	5	5	3	25	75	100
	DSC7	Discipline - Specific Core Course	UBBA4002	Company Law	4	4	3	25	75	100
	0507	Other Elective	UBBAAL41	Organisational Behaviour	4	3	3	25	75	100
	OEC7	Course	UBBAAP41	Tally - Advanced - Lab	4	3	3	25	75	100
		Value-Based	UBVBC401	1. Cyber Security#						
	VBC4	Course (To choose 1 out of 2)	UBVBC402	2. Entrepreneurship#	1	1	1	-	25	25
	INT1 Apprenticeship / Internship and Report 3		Report 30 hrs per Semester	-	-	-	-	-	-	
				TOTAL	30	25	-	175	550	725
	DSC8	Discipline - Specific Core Course	UBBA5001	Accounting for Managerial Decisions	5	5	3	25	75	100
			1	1						

	DSC9	Discipline - Specific Core Course	UBBA5002	Financial Management	5	4	3	25	75	100
	DSC10	Discipline - Specific Core Course	UBBA5003	Export Management	5	4	3	25	75	100
	DSC11	Discipline - Specific Core Course	UBBA5004	Human Resource Management (B.Com, B.Com.CA, B.Com. F&A, BBA)	5	4	3	25	75	100
V	DSC12	Discipline - Specific Core Course	UBBA5005	Total Quality Management	3	3	3	25	75	100
		Discipline-	UBBADE51	Retail Management						
	DSE1	Specific Elective	UBBADE52	2. Services Marketing	5	4	3	25	75	100
	DSET	(To choose		3 . Time Management	5	4	3	25	75	100
		1 out of 3)	UBBADE53	-						
		Skill Enhancement	UBBASEP5	1. MS- Office- Basics – (Lab)				0.5	7.5	400
	SEE1	Elective Course (To choose	UBBASE52	2. SPSS – Basics	2	1	3	25	75	100
		1 out of 3)	UBBASE53	3. DBMS- Basics						
	INT1	•	/ Internship and	Report 30 hrs per Semester	_	_	-	_	_	_
				TOTAL	30	25	_	175	525	700
		Discipline -							020	
	DSC13	Specific Core Course	UBBA6001	Marketing Research	5	5	3	25	75	100
	DSC14	Discipline - Specific Core Course	UBBA6002	Industrial Relations	5	4	3	25	75	100
	DSC15	Discipline - Specific Core Course	UBBA6003	Advertising and Salesmanship	5	4	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBBA6004	Entrepreneurial Development	5	3	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBBA6005	Digital Marketing	3	3	3	25	75	100
		Discipline-	UBBADE61	1. E-Commerce						
	DSE2	Specific Elective	UBBADE62	2. Change Management	5	4	3	25	75	100
VI	<b></b>	(To choose 1 out of 3)	UBBADE63	3. Business Ethics	1					
		Skill		MSOffice- Advanced –	1					
	0===	Enhancement	UBBASEP6	(Lab)	1	_				
	SEE2	Elective Course (To choose 1	UBBASE62	2. SPSS-Advanced	2	1	3	25	75	100
		out of 3)	UBBASE63	3. DBMS- Advanced						
	INT1	Internship	UBBAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC4	Skill Enhancement	UBEXAC61	Extension Activities 40°hrs	-	-	-	25	75	100
	VBC5	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180	-	1075	3225	4400
				CAARD TOTAL	100	100		1073	ULLU	7700

The 90## hours of Apprenticeship/Internship/Project and 40° hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in the Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, #Handled by the Allied Department, @SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs, and an additional one credit is taken for the calculation of CGPA

#### Programme Specific Outcomes (PSOs) For Bachelor of Business Administration

#### At the end of the BBA Programme, the students will be able to

**PSO1**: Communicate management principles, thoughts and ideas effectively with individuals, groups and organizations.

**PSO2**: Demonstrate Knowledge of Management concepts, principles, theories and techniques related to finance, HR, production and marketing.

**PSO3:**Synthesize learned Knowledge and acquired skills to plan, organize, direct and control a businessor organization effectively and efficiently as an entrepreneur, businessman or professional.

**PSO4:** Critically evaluate problems related to Work-Life and take appropriate decisions to solve theissues.

**PSO5**: Exhibit potential to accomplish professional tasks independently as a team member and teamleader.

**PSO6**: Develop products and services; collaborate with organizations to help Society in increasing theliving standards and building a sustainable environment.

**PSO7**: Identify, plan, execute, and manage projects after careful appraisal with professional ethics andvalues.

**PSO8**: Use online/offline information & communication tools and technologies and develop a passion forlifelong learning through MOOCs, ODL, and self-learning techniques.

#### MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME

PSOs					PO	s (B.Co	m/BBA)				
(BBA)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	TOTAL (80)
PSO1	✓	✓	✓	<b>✓</b>	✓	✓	<b>✓</b>	<b>✓</b>		✓	9
PSO2	✓	<b>✓</b>	✓	✓	✓	✓	✓	✓		✓	9
PSO3	✓	✓	<b>√</b>	✓	✓	✓	<b>✓</b>	<b>✓</b>		✓	9
PSO4		✓	<b>√</b>	✓	✓		<b>✓</b>	<b>✓</b>	✓	✓	8
PSO5		✓	✓	✓	✓	✓	✓	✓	✓		8
PSO6	✓	✓	✓		✓		<b>✓</b>	<b>✓</b>	✓		7
PSO7	✓	✓	✓		✓	✓	<b>✓</b>		✓	✓	8
PSO8	✓	<b>√</b>	<b>✓</b>			✓	✓	✓	✓		7
TOTAL	6	8	8	5	7	6	8	7	5	5	65

**OUTCOMES** 

#### **MAPPING CORRELATION BENCHMARK**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

#### PROGRAMME OUTCOMES (POs) for B.C.A

#### By the end of the Programme, the students will be able to

PO1	Communicate in English the ideas, findings, and results effectively through conversations, meetings, and reports, primarily through digital means. Develop linguistic skills in one Indian/Regional language.
PO2	Demonstrate Knowledge of the concepts, principles, theories, and techniques of the domain and allied subject areas.
PO3	Synergise knowledge with Analytical and experimental skills to systematically create & run programs/carry out experiments/formulate & prove theories to enrich the body of Knowledge
PO4	Synthesize learned Knowledge and acquired skills to Identify and critically analyze pertinent problems in the relevant discipline using appropriate tools and techniques.
PO5	Exhibit potential to accomplish tasks independently or as a member or leader of a team.
PO6	Utilize specialized instruments and equipment, Computers, Software, Internet, and other ICT tools to carry out experiments.
PO7	Demonstrate Knowledge and scientific understanding to design experiments, use appropriate methodologies, analyze and interpret data and provide solutions, Exhibit organizational skills, and the ability to manage time and resources.
PO8	Create Compounds/Products/Software or Design experiments and collaborate to help Society in building a Sustainable Environment.
PO9	Discover a passion for Lifelong Learning through MOOCs, ODL, and Self-learning techniques through the optimum use of ICT.
PO10	Identify and assess various issues in the Environment and suggest measures to overcome them. Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future

	COU			HELOR OF COMPUTER itted from the academic y				NS [B	3.C.A]	
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
		Generic Elective	UBFUR101	Urdu I						
	GE1	(To choose 1	UBFAR101	Arabic I	6	5	3	25	75	100
		out of 4)	UBFHD101	Hindi I	_					
	050	Occasio Election	UBFTA101	Tamil I				0.5	75	400
	GE2	Generic Elective Ability	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Enhancement Course	UBVED101	Value Education*	2	1	3	25	75	100
ı	DSC1	Discipline - Specific Core Course	UBCC1001	Digital Logic Fundamentals & Microprocessors	3	3	3	25	75	100
-	SEC1	Skill Enhancement Course	UBSKB103	Professional Communication for Physical Sciences**	3	3	3	25	75	100
	0201	Discipline-Specific Core Practical	UBCCPR11	Programming in C - Lab	3	-	-	-	-	-
	OEC1	Other Elective Course	UBCCAL11	Allied - Mathematical Foundation I	5	5	3	25	75	100
		Other Elective Course		Allied - Mathematical Foundation - Lab	3	-	-	-	-	-
	VBC1	Value-Based	UBVBC101	1. Moral Education#						
	.50.	Course (To Choose 1 out of 2) [Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	22	-	150	475	625
			UBFUR201	Urdu II						
	GE3	Generic Elective (To choose 1	UBFAR201	Arabic II	6	5	3	25	75	100
	GES	out of 4)	UBFHD201	Hindi II		3	3	23	73	100
			UBFTA201	Tamil II						
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100
	AEC2	Ability Enhancement Course	UBENV201	Environmental Studies *	2	1	3	25	75	100
II	DSC2	Discipline - Specific Core Course	UBCC2001	Programming in C & Algorithm	6	6	3	25	75	100
	DSC3	Discipline -						0.	75	100
	5003	Specific Core Course	UBCCPR21	Programming in C - Lab	3	3	3	25	75	
	OEC2	•	UBCCPR21  UBCCAL21	Programming in C - Lab  Allied - Mathematical Foundation II	3 4	5	3	25	75	100
		Course Other Elective Course Other Elective Course		Allied - Mathematical Foundation II Allied - Mathematical Foundation - Lab						100
	OEC2	Course Other Elective Course Other Elective Course Value-Based Course	UBCCAL21	Allied - Mathematical Foundation II Allied - Mathematical	4	5	3	25	75 75	100
	OEC2	Course Other Elective Course Other Elective Course Value-Based	UBCCAL21  UBCCAP21	Allied - Mathematical Foundation II Allied - Mathematical Foundation - Lab  1. Physical Education -	4	5	3	25	75	
	OEC2	Course Other Elective Course Other Elective Course Value-Based Course (To choose 1 out of 2))[Online	UBCCAL21  UBCCAP21  UBVBC201	Allied - Mathematical Foundation II Allied - Mathematical Foundation - Lab  1. Physical Education - Sports I*	4	5	3	25	75 75	100
	OEC2	Course Other Elective Course Other Elective Course Value-Based Course (To choose 1 out of 2))[Online Exam]	UBCCAL21  UBCCAP21  UBVBC201	Allied - Mathematical Foundation II Allied - Mathematical Foundation - Lab 1. Physical Education - Sports I# 2. Health & Wellness#	4 4	5 3	3 3	25 25	75 75 <b>25</b>	100
111	OEC2	Course Other Elective Course Other Elective Course Value-Based Course (To choose 1 out of 2))[Online	UBCCAL21  UBCCAP21  UBVBC201  UBVBC202	Allied - Mathematical Foundation II Allied - Mathematical Foundation - Lab  1. Physical Education - Sports I#  2. Health & Wellness#	4 4	5 3	3 3	25 25	75 75 <b>25</b>	100

	1		UBFTA301	Tamil III	1	1				
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		0/1 FI //	UBURNM31	Basic Urdu I						
		Other Elective Course	UBARNM32	Basic Arabic I	1					
	OEC4	(To choose 1	UBHDNM33	Basic Hindi I	2	1	3	25	75	100
		out of 4)	UBTANM33	Ithazhiyal I						
		Discipline -	OBTAINIO							
	DSC4	Specific Core	UBCC3001	C++ & Data Structures	6	4	3	25	75	100
		Course								
		Discipline -		C++ & Data Structures -						
	DSC6	Specific Core	UBCCPR31	Lab	3	3	3	25	75	100
		Course		Commission Oriented						
		Other Elective Courses (To	UBCCAL31	Computer Oriented						
	OEC5	choose		Financial Accounting I	5	4	3	25	75	100
		1 out of 2)	UBCCAL32	Discrete Mathematics						
		,		Allied - Computer Oriented						
		Other Elective	UBCCAP31	Financial Accounting -						
	OEC6	Courses (To		Lab I	3	3	3	25	75	100
		choose		Allied - Discrete						
		1 out of 2)	UBCCAP32	Mathematics - Lab						
		Value-Based		1. N.C.C, N.S.S, YRC &						
		Course (To	UBVBC301	RRC#						
	VBC3	Choose 1		2. Physical Education –	1	1	1	-	25	25
	out of 2))		UBVBC302	Sports II#						
		[Online Exam]		operto ii						
				TOTAL	30	25	-	175	550	725
			UBFUR401	Urdu IV						
	057	Generic Elective	UBFAR401	Arabic IV	1		_	25	75	400
	GE7	(To choose 1 out of 4)	UBFHD401	Hindi IV	4	4	3	25	75	100
			UBFTA401	Tamil IV						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
		Other Elective	UBURNM31	Basic Urdu II						
	OEC7	Course	UBARNM32	Basic Arabic II	١ ,	١,	_	25	75	400
	OEC/	(To choose 1	UBHDNM33	Basic Hindi II	2	1	3	25	75	100
		out of 4)	UBTANM33	Ithazhiyal II						
	DSC7	Discipline - Specific Core Course	UBCC4001	Programming in Java	6	4	3	25	75	100
	DSC9	Discipline Specific Core Practical	UBCCPR41	Programming in Java - Lab	3	3	3	25	75	100
V		Other Elective	UBCCAL41	Allied - Computer Oriented Financial Accounting II						
	OEC8	Course (To choose 1 out of 2)	UBCCAL42	Allied - Operation Research	5	4	3	25	75	100
	OEC9	Other Elective Course (To	UBCCAP41	Allied Computer Oriented Financial Accounting – Lab II	3	3	3	25	75	100
	0203	choose 1 out of 2)	UBCCAP42	Operation Research - Lab	-				70	100
		Value-Based Course (To	UBVBC401	1. Cyber Security#						
	VBC4	Choose 1 out of 2))[Online Exam]	UBVBC402	2. Entrepreneurship#	1	1	1			25
	INT1		nternship and Re	port 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	725

DSC11   Sicpline -   DSC12   Specific Core   DSC12   Specific Core   DSC12   Specific Core   DSC12   Specific Core   Course   DSC12   Specific Core   DSC12   Specific Core   Course   DSC13   Specific Core   Course   DSC14   Specific Core   DSC15   Specific Core   DSC14   Specific Core   DSC14   Specific Core   DSC14   Specific Core   DSC14   DSC15   DSC1			Discipline -		Machine Learning: Data						[
DSC11   Specific Core   Course   DSC12   Specific Core   Course   DSC12   Specific Core   Course   DSC13   Specific Core   Course   DSC13   Discipline - Specific Core   Course   DSC13   Discipline - Specific Core   Course   DSC14   Specific Core   Course   DSC15   DSC		DSC10	Specific Core	UBCC5001	Mining Using Python	6	5	3	25	75	100
DSC11   Specific Core   Course   DSC12   Specific Core   Course   DSC12   Specific Core   Course   DSC13   Specific Core   Course   DSC14   Specific Core   Course   DSC14   Specific Core   Course   DSC14   DSc)pline - Specific Core   Course   DSC14   DSc)pline - Specific Core   Course   DSC15   DSc)pline - Specific Core   Course   DSC)pline - Specific Core   DSC015   DSC)pline - Specific Core   DSC015					3 3 7						
V   DSC12   Discipline   Specific Core   Course   Discipline   Specific Core   UBCCPR51   Data Mining using Python   3   3   6   25   75		DSC11		LIBCC5002	Computer Network	6	5	3	25	75	100
V   DSC12   Discipline - Specific Core Course   DSC13   Specific Core Course   DSC13   Specific Core Course   DSC14   Specific Core Course   DSC15   DIscipline - Specific Core Course   DIscipline - Specific Cohose 1 out of 3)   DIscipline - Specific Cohose 1 out of 3)   DISCOED53   DIscipline - Specific Course   DISCOED54   DISCOED54   DISCOED55   DI		Doon	I	0000002	Computer Network				20	'	100
V   DSC13   Discipline - Specific Core Course   Discipline - Specific Core Course   Discipline - Specific Course Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Course Course   Discipline - Specific Discipline - Specific Discipline - Specific Course (To choose 1 out of 3)   Discipline - Specific											
Name		DSC12		UBCC5003	Operating Systems	5	4	3	25	75	100
DSC13   Specific Core   Course   Discipline - Specific Core   Course   Discipline - Specific   DSC14   Specific Core   DISCIPLINE   D											
Discipline - Specific Core Course	٧	DCC42		LIBCODDE4	Data Mining using Python	2	2	6	25	75	100
DSC14   Discipline - Specific Core Course   UBCCPR52   Computer Network Lab   3   3   6   25   75		DSC13		UBCCPRST	Lab	3	3	О	25	/5	100
DSC14   Specific Core   Course   Course   Course   Course   Cotoose 1 out of 3)   UBCCDE51   1. Programming in R   UBCCDE52   2. Deep Learning   5   4   3   25   75											
Discipline-Specific   Clective (To choose 1 out of 3)		DSC14		UBCCPR52	Computer Network Lab	3	3	6	25	75	100
DSE1			Course								
SEE1					1. Programming in R						
SEE1   Skill Enhancement   Elective Course (To choose 1 out of 3)   UBCCSEP5   2. Deep Learning Lab   UBCCSEP6   UBCCSEP6   2. Deep Learning Lab   UBCCSEP6   2. Deep Learning Lab   UBCCSEP6   UBCCSEP6   UBCCSEP6   UBCCSEP6   UBCCSEP6   UBCCSEP6   UBCCSEP6   UBCCSEP6   UBCCSEP6   USCSEP6   USCS		DSE1		UBCCDE52		5	4	3	25	75	100
SEE1				UBCCDE53							
SEE1   Elective Course (To choose 1 out of 3)   UBCCSEP6   2. Deep Learning Lab   UBCCSEP6   3. Cloud Computing   2			• -								
SEE1				UBCCSEP5							
NT1		SEE1		UBCCSEP6		2	1	3	25	75	100
NT1				UBCCSE53	·						
DSC15		INT1	Apprenticeship / Inte		-	-	-	-	-	-	
DSC13					TOTAL	30	25	-	175	525	700
DSC16   Discipline - Specific   Core Course   UBCC902   Software Engineering   5   5   3   25   75		DSC15		UBCC6001		5	5	3	25	75	100
SEC5					Systems		_	<u> </u>	20		100
DSC17   Discipline - Specific   Core Course   Database Management   Systems - Lab   Systems - Lab   Discipline - Specific   Core Course   UBCCPR62   Mobile Application   Development - Lab   4   3   25   75		DSC16		UBCC6002	Software Engineering	5	5	3	25	75	100
DSC17   Core Course   UBCCPR61   Systems - Lab   S   4   3   25   75		SEC5		UBCCPJ62		5	4	3	25	75	100
DSC18		DSC17		UBCCPR61		5	4	3	25	75	100
Development - Lab		DSC18	Discipline - Specific	UBCCPR62	Mobile Application	4	3		25	75	100
Discipline-Specific   Elective (To choose   1 out of 3)   UBCCDE62   2. Open Source   Programming   UBCCDE63   3. Business intelligence   and Analytics   Lab   UBCCSEP7   UBCCSEP7   Lab   UBCCSEP8   UBCCSEP8   2. Open Source   Programming Lab   UBCCSEP9   3. Business Intelligence   and Analytics   Lab   UBCCSEP9   UBCCSEP9   3. Business Intelligence   and Analytics - Lab   UBCCSEP9   To choose   1 out of 3)   UBCCSEP9   To choose   UBCCSEP9   To choose   Analytics - Lab   UBCCSEP9   To choose   To choo		D0010	Core Course	OBOOT NOZ					20	, 0	100
VI			Discipline-Specific	UBCCDE61							
VI		DSE2	Elective	LIBCCDE62	2. Open Source	1	2	3	25	75	100
SEE2   Skill Enhancement   UBCCSEP7   1. Big Data and Analytics   Lab   UBCCSEP8   UBCCSEP8   2. Open Source   Programming Lab   UBCCSEP9   3. Business Intelligence   and Analytics - Lab   UBCCSEP9   To thoose   UBCCSEP9   To t		DUEZ		OBCODE02		ļ <b>"</b>		"	23	13	100
SEE2   Skill Enhancement   UBCCSEP7   1. Big Data and Analytics   Lab	,,,		i out or s)	UBCCDE63							
SEE2   Skill Enhancement   Clab   C	VI			UBCCSEP7	Big Data and Analytics						
Course   C				320001.7		-					
INT1 Internship UBCCPJ61 Apprenticeship / Internship & Report 30+30+30=90## - 30 3 25 75  SEC5 Skill Enhancement Course UBEXAC61 Extension Activities 40° hrs 25 75		SEE2		UBCCSEP8		2	1	3	25	75	100
INT1 Internship UBCCPJ61 Apprenticeship / Internship & Report 30+30+30=90## - 30 3 25 75  SEC5 Skill Enhancement Course UBEXAC61 Extension Activities 40° hrs 25 75				UBCCSEP9	3. Business Intelligence	1					
Apprenticeship / Internship & Report 30+30+30=90## - 30 3 25 75  SEC5 Skill Enhancement Course UBEXAC61 Extension Activities 40° hrs 25 75				3200010	and Analytics - Lab						
Apprenticeship / Internship & Report 30+30+30=90## - 30 3 25 75  SEC5 Skill Enhancement Course UBEXAC61 Extension Activities 40° hrs 25 75		INT1	Internshin	UBCCPJ61							
SEC5 Skill Enhancement Course UBEXAC61 Extension Activities 40° hrs 25 75		11411	monionip			_	30	3	25	75	100
Course OBEXAC61 Extension Activities 40*fils 25 75					& Report 30+30+30= 90""						
Course Co			01:11 5								
		SEC5		UBEXAC61	Extension Activities 40° hrs	-	-	-	25	75	100
I Value-Based   SWAVAM / Opling Challen Tutorial by UT			Value-Based	CIMAVANA / O	lina Spakan Tutarial by UT						
VBC5 Value-Based SWAYAM / Online Spoken Tutorial by IIT - 1		VBC5				-	1	-	-	-	-
TOTAL 30 55 - 225 675							55	-	225	675	900
GRAND TOTAL 180 180 - 1075 3225					GRAND TOTAL	180	180	-	1075	3225	4400

The 90## hours of Apprenticeship/Internship/Project and 40° hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activity is included in Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, #Handled by the Allied Department, @SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs and an additional one credit is taken for the calculation of CGPA

PROGRAMME SPECIFIC OUTCOMES (PSOs) for B.C.A

#### By the end of the Programme, the students will be able to

PSO1	Computational Ability: Implementing fundamentals of computing, computing specialization and domain knowledge suitable for job placement.
PSO2	Problem Analysis: Identity, formulate and analyze complex real-life problems in terms of mathematical modelling and computer science.
PSO3	Design /Development of solutions: Design algorithms for complex, real-world problems through computing systems, components or processes.
PSO4	Investigate Problems: Ability to analyze and investigate complex computing problems through the design of experiments, analysis and interpretation of data.
PSO5	Exploration: Ability to explore the stored data to bring out valuable information.
PSO6	Professional ethics: Ability to perform professional practices ethically, keeping in mind cyber regulations & laws.
PSO7	Self-learning: Ability to engage in independent learning for continuous self-development as a computing professional.
PSO8	Communication: Ability to effectively communicate with the technical community
PSO9	Individual and Teamwork: Ability to work in a hierarchical team both as a member and leader.
PSO10	Innovation and entrepreneurship: Ability to apply innovative ideas to become an entrepreneur.

### $\frac{\text{MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME}}{\text{OUTCOMES}}$

Programme Specific	Programme Outcomes (POs)												
Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10			
PSO1	✓	✓			✓	✓	✓						
PSO2	✓		✓	✓	✓		✓						
PSO3	✓	✓	✓	✓			✓						
PSO4	✓	✓	✓	✓			✓	✓					
PSO5	✓				✓	✓	✓	✓	✓				
PSO6	✓	✓	✓	✓	✓		✓	✓		✓			
PSO7	✓				✓	✓	✓	✓	✓				
PSO8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
PSO9	✓				✓			✓	✓				
PSO10	✓				✓	✓	✓	✓		✓			
Number of	matches	= 61, C	orrelatio	n: Very I	ligh			•		•			

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

\*\*\*\*\*

### B.COM. DEGREE PROGRAMME (CBCS PATTERN) PROGRAMME OUTCOMES

- PO1 Communicate ideas, thoughts, and Knowledge through English effectively with individuals, groups, and businesses using Verbal, Non-Verbal, and Digital modes of Communication. Develop linguistic skills in one Indian/Regional language.
- **PO2** Demonstrate Knowledge of the concepts, principles, theories, and techniques related to various business forms, facets, and functions.
- **PO3** Synthesize learned Knowledge and acquired skills to establish, organize, manage, and develop a business/organization effectively and efficiently in the capacity of an entrepreneur, businessman, or any other professional.
- **PO4** Critically evaluate a problem/environment and make informed business decisions to solve problems.
- PO5 Exhibit potential to accomplish tasks independently or as a member or leader of a team.
- **PO6** Use Computers, Software, the Internet, and other ICT tools to maximize resource utilization and increase efficiency in day-to-day business operations.
- PO7 Plan, execute, and manage a Project after careful appraisal
- **PO8** Develop products, Frame Policies, and collaborate to help Society in increasing living standards and towards building a Sustainable Environment
- **PO9** Discover a passion for Lifelong Learning through MOOCs, ODL, and Self-learning techniques through the optimum use of ICT.
- **PO10** Identify and assess various environmental issues and suggest measures to overcome them. Exhibit Ethics and Values in professional, Social, and Personal spheres of life, caring for the underprivileged, leading to a better sustainable future

#### PROGRAMME SPECIFIC OUTCOMES for B.COM.

- **PSO1** Prepare Accounts to evaluate business/organization/corporate firms & their operations and assist in Business decision-making for increasing profitability, decreasing costs, selecting from various alternatives, and Reporting the statements, using computers and software effectively.
- **PSO2** Develop Entrepreneurial intent, skills, and abilities and make students capable of Communicating, Organising, and managing Business operations, especially Accounting and Finances, Human Resources, and Marketing. Use computers for creating documents, spreadsheets, and presentations
- **PSO3** Understand the principles and techniques of Business Domains such as Accounting, Auditing, Marketing, Banking& Financial Institutions in traditional and digital domains. Utilize Statistical tools for data collection, presentation & analysis and make decisions accordingly
- **PSO4** Understand and Apply effective communication principles and techniques in various business domains, drafting necessary contacts in the daily operations of a Business.
- **PSO5** Understand various Acts and legal Provisions concerning/governing the operation of Businesses and Companies and comprehend the Indirect Taxes levied in India. Appreciate the need for Corporate Social Responsibility and sustainability reporting and understand the process and legalities related to it.
- **PSO6** Understand the concepts of Income Tax and use it to compute Income Tax payable by Individuals and Firms, allowing for further Tax Planning, Management, and filing of returns.
- **PSO7** Understand different service firms. Fill up and Process various forms related to Banking, Insurance, Office Communication, Cost Accounting, Income Tax, and GST.
- **PSO8** Plan, appraise, Execute, and Manage a well-determined Project for the practical completion of planned activities. Develop self and hone necessary Entrepreneurship Skills, Employability skills, and teamwork Attitude, and inculcate ethics in personal and professional walks of life.

## MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme				Progra	amme O	utcomes	(POs)			
Specific Outcomes (PSOs)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓	✓		✓			✓	✓
PSO2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO3	✓	✓	✓	✓	✓	✓	✓	✓	✓	
PSO4	✓	✓	✓		✓	✓	✓			
PSO5		✓	✓	✓				✓		✓
PSO6	✓	✓	✓							✓
PSO7	✓	✓	✓		✓	✓			✓	✓
PSO8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Number	of match	es = 58	, Correla	tion: Ver	y High					

#### **MAPPING CORRELATION BENCHMARK**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-24	25-50	51-56	57-80
Correlation	Poor	Moderate	High	Very High

### COURSE STRUCTURE FOR COMMERCE (For the candidates admitted from the academic year 2022-2023)

	(For the candidates admitted from the academic year 2022-2023)									
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
			UBFUR101	Urdu I						
	GE1	Generic Elective (To choose 1	UBFAR101	Arabic I	6	5	3	25	75	100
	GEI	out of 4)	UBFHD101	Hindi I		5	3	23	/5	100
		-	UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education *	2	1	3	25	75	100
I	DSC1	Discipline - Specific Core Course	UBCO1001	Financial Accounting I	7	6	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB102	Professional Communication for Commerce and Management**	3	3	3	25	75	100
	OEC1	Other Elective Course	UBCOAL11	Allied - Modern Business Organisation	7	5	3	25	75	100
	VBC1	Value-Based	UBVBC101	1. Moral Education#						
		Course (To choose 1 out of 2) [Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	150	475	625
			UBFUR201	Urdu II						
	050	Generic Elective	UBFAR201	Arabic II		5	3	25	75	400
	GE3	(To choose 1 out of 4)	UBFHD201	Hindi II	6		3			100
			UBFTA201	Tamil II						
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100
	AEC2		UBENV201	Environmental Studies *	2	1	3	25	75	100
		Course						23	7.5	
П	DSC2	Discipline - Specific Core Course	UBCO2001	Financial Accounting II	5	4	3	25	75	100
II	DSC2	Discipline - Specific Core	UBCO2001 UBCO2002							100
II		Discipline - Specific Core Course Discipline - Specific Core		Financial Accounting II  Business Management  Allied - Leadership and	5	4	3	25	75	
II	DSC3	Discipline - Specific Core Course Discipline - Specific Core Course Other Elective	UBCO2002	Financial Accounting II  Business Management	5 4	3	3	25 25	75 75	100
II	DSC3  OEC2  OEC3	Discipline - Specific Core Course Discipline - Specific Core Course Other Elective Course Other Elective Course Value-Based Course	UBCO2002 UBCOAL21	Financial Accounting II  Business Management  Allied - Leadership and Team Development  Allied - Computer Applications in Business -	5 4 4 4	4 3 4 3	3 3 3	25 25 25	75 75 75 75	100
II	DSC3	Discipline - Specific Core Course Discipline - Specific Core Course Other Elective Course Other Elective Course Value-Based	UBCO2002 UBCOAL21 UBCOAP21	Financial Accounting II  Business Management  Allied - Leadership and Team Development  Allied - Computer Applications in Business - Lab  1. Physical Education -	5 4 4	3	3 3	25 25 25	75 75 75	100

					1					
			UBFUR301	UBFUR301						
	GE5	Generic Elective (To choose 1 out	UBFAR301	UBFAR301	4	4	3	25	75	100
	OL5	of 4)	UBFHD301	UBFHD301				20	''	100
			UBFTA301	UBFTA301						
	GE6	Generic Elective	UBFEN301	UBFEN301	6	4	3	25	75	100
			UBTANM31	Ithazhiyal I						
			UBURNM31	Basic Urdu I						
	OEC4	Non-Major	UBHDNM31	Basic Hindi I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
	DSC4	Discipline - Specific Core Course	UBCO3001	Corporate Accounting I	5	5	3	25	75	100
Ш	DSC5	Discipline - Specific Core Course	UBCO3002	Modern Banking	4	3	3	25	75	100
	0505	Other Elective	UBCOAL31	Allied – Business Economics	4	3	3	25	75	100
	OEC5	Course	UBCOAL32	Computerised Accounting	4	3	3	25	75	100
		Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#						
	VBC3	(To choose 1 out of 2)	UBVBC302	Physical Education –     Sports II*	1	1	1	-	25	25
				TOTAL	30	25	-	175	550	725
			UBFUR401	UBFUR401						
	057	Generic Elective	UBFAR401	UBFAR401	1	١,	3	25	75	100
	GE7	(To choose 1 out of 4)	UBFHD401	UBFHD401	4	4	3	25	/5	100
			UBFTA401	UBFTA401						
	GE8	Generic Elective	UBFEN401	UBFEN401	6	4	3	25	75	100
			UBTANM41	Ithazhiyal II						
	0500	Non Maion	UBURNM41	Basic Urdu II			3	25	75	100
	OEC6	Non-Major	UBHDNM41	Basic Hindi II	2	1	3	23	/3	100
			UBARNM41	Basic Arabic II						
IV	DSC7	Discipline - Specific Core Course	UBCO4001	Corporate Accounting II	5	5	3	25	75	100
	DSC8	Discipline - Specific Core Course	UBCO4002	Modern Marketing	4	4	3	25	75	100
		Other Elective	UBCOAL41	Allied - Business Statistics	4	3	3	25	75	100
	OEC7	Course	UBCOAL42	Allied – Goods and Services Tax	4	3	3	25	75	100
		Value-Based	UBVBC401	1. Cyber Security#						
	VBC4	Course (To choose 1 out of 2)	UBVBC402	2. Entrepreneurship#	1	1	1	-	25	25
	INT1	Apprenticeship / In	ternship and Rep	ort 30 hrs. per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	550	725
	DSC10	Discipline - Specific Core Course	UBCO5001	Cost Accounting I	5	5	3	25	75	100

				GRAND TOTAL	180	180	-	1075	3225	4400
				TOTAL	30	55	-	225	675	900
	VBC6	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC®	-	1	-	-	-	-
	SEC4	Skill Enhancement Course	UBEXAC61	Extension Activities 40°hrs	-	-	-	25	75	100
	INT1	·		Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
		out of 3) Internship	UBCOSE63 UBCOPJ61	Trading						
	SEE2	Elective Course (To choose 1	UBCOSE62	Employability skills     Stock and Securities	2	1	3	25	75	100
		Enhancement	UBCOSE61	1. E-Commerce						
		Skill	UBCODE63	3. Export Management						
VI	DSE2	Specific Elective (To choose 1 out of 3)	UBCODE62	2. Corporate Social Responsibility and Sustainability Reporting	5	4	3	25	75	100
		Discipline-	UBCODE61	Digital Financial Services     Corporate Social	4					
	DSC19	Specific Core Course	UBCO6005	Practical Auditing	4	3	6	25	75	100
	DSC18	Specific Core Course Discipline -	UBCO6004	Entrepreneurial Development	4	3	3	25	75	100
	DSC17	Specific Core Course Discipline -	UBCO6003	Income Tax Law & Practice II	5	4	3	25	75	100
	DSC16	Specific Core Course Discipline -	UBCO6002	Management Accounting II	5	4	3	25	75	100
	DSC15	Specific Core Course Discipline -	UBCO6001	Cost Accounting II	5	5	3	25	75	100
		Discipline -		TOTAL	30	25	-	175	525	700
	INT1	Apprenticeship / Ir	nternship and Re	eport 30 hrs. per Semester	-	-	-	-	-	-
		(To choose 1 out of 3)	UBCOSE53	Personality and Career     Development						
	SEE1	Elective Course	UBCOSE52	2. Digital Marketing	2	1	3	25	75	100
		Skill Enhancement	UBCOSE51	Commerce Practical - Lab						
		out of 3)	UBCODE53	3. Personal Finance						
	DSE1	Specific Elective (To choose 1	UBCODE52	2. Investment Management	5	4	3	25	75	100
		Course Discipline-	UBCODE51	Business Environment						
	DSC14	Course Discipline - Specific Core	UBCO5005	Financial Management	4	3	3	25	75	100
	DSC13	Course Discipline - Specific Core	UBCO5004	Human Resource Management	4	4	3	25	75	100
	DSC12	Discipline - Specific Core	UBCO5003	Income Tax Law & Practice I	5	4	3	25	75	100
V	DSC11	Discipline - Specific Core Course	UBCO5002	Management Accounting I	5	4	3	25	75	100

The 90## hours of Apprenticeship/Internship/Project and 40° hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in the Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, #Handled by the Allied Department, @SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs, and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	4	18	100	400
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	3	9	100	300
Other Elective Course – Allied (OEC)	9	28	100	900
Discipline - Specific Core Course (DSC)	19	78	100	1900
Discipline-Specific Elective (DSE)	2	8	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

## COURSE STRUCTURE FOR B.Com. Computer Applications (For the candidates admitted from the academic year 2022-2023)

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
			UBFUR101	Urdu I						
	054	Generic Elective	UBFAR101	Arabic I	1	_	2	25	7.5	100
	GE1	(To choose 1 out of 4)	UBFHD101	Hindi I	6	5	3	25	75	100
		Sat St. 1,	UBFTA101	Tamil I						
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100
	AEC1	Ability Enhancement Course	UBVED101	Value Education *	2	1	3	25	75	100
ı	DSC1	Discipline - Specific Core Course	UBCA1001	Financial Accounting I	7	6	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB102	Professional Communication for Commerce and Management**	3	3	3	25	75	100
	OEC1	Other Elective Course	UBCAAL11	Allied - Information Technology for Business (Theory)	7	5	3	25	75	100
	VBC1	Value-Based Course (To	UBVBC101	1. Moral Education#						
		choose 1 out of 2)[Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1	1	1	-	25	25
				TOTAL	30	25	-	150	475	625
		Generic	UBFUR201	Urdu II						
	050	Elective	UBFAR201	Arabic II		_	3	25	7.5	100
	GE3	(To choose 1	UBFHD201	Hindi II	6	5	3	25	75	100
		out of 4)	UBFTA201	Tamil II						
			001 171201							
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100
	GE4 AEC2	Generic Elective Ability Enhancement Course	ł	English II  Environmental Studies*	2	1	3	25 25	75 75	100
II		Ability Enhancement	UBFEN201							
II	AEC2	Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course	UBFEN201 UBENV201	Environmental Studies*	2	1	3	25	75	100
II	AEC2	Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core	UBFEN201  UBENV201  UBCA2001	Environmental Studies*  Financial Accounting II  Business Management  Allied - Consumer Welfare	2 5	1 4	3	25 25	75 75	100
II	DSC2	Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course Other Elective	UBFEN201  UBENV201  UBCA2001  UBCA2002	Environmental Studies*  Financial Accounting II  Business Management  Allied - Consumer Welfare  Allied - Information Technology for Business - Lab	5	1 4 3	3 3	25 25 25	75 75 75	100
II	DSC2 DSC3 OEC2 OEC3	Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course Other Elective Course Other Elective Course Value-Based Course (To	UBFEN201  UBENV201  UBCA2001  UBCA2002  UBCAAL21	Environmental Studies*  Financial Accounting II  Business Management  Allied - Consumer Welfare  Allied - Information Technology for Business -	2 5 4 4	1 4 3 4 3	3 3 3 3	25 25 25 25	75 75 75 75 75	100 100 100 100
II	DSC2 DSC3 OEC2	Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course Other Elective Course Other Elective Course Value-Based	UBFEN201  UBENV201  UBCA2001  UBCA2002  UBCAAL21  UBCAAP21	Environmental Studies*  Financial Accounting II  Business Management  Allied - Consumer Welfare  Allied - Information Technology for Business - Lab  1. Physical Education -	5 4	1 4 3 4	3 3 3	25 25 25 25	75 75 75 75	100 100 100
II	DSC2 DSC3 OEC2 OEC3	Ability Enhancement Course Discipline - Specific Core Course Discipline - Specific Core Course Other Elective Course Other Elective Course Value-Based Course (To choose 1 out of 2)[Online	UBFEN201  UBENV201  UBCA2001  UBCA2002  UBCAAL21  UBCAAP21  UBVBC201	Environmental Studies*  Financial Accounting II  Business Management  Allied - Consumer Welfare  Allied - Information Technology for Business - Lab  1. Physical Education - Sports I#	2 5 4 4	1 4 3 4 3	3 3 3 3	25 25 25 25	75 75 75 75 75	100 100 100 100

I		of 4)								
		,	UBFAR301	UBFAR301	1					
			UBFHD301	UBFHD301						
			UBFTA301	UBFTA301						
	GE6	Generic Elective	UBFEN301	UBFEN301	6	4	3	25	75	100
			UBTANM31	Ithazhiyal I						
			UBURNM31	Basic Urdu I						
Ш	OEC4	Non-Major	UBHDNM31	Basic Hindi I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
	DSC4	Discipline - Specific Core Course	UBCA3001	Corporate Accounting I	5	5	3	25	75	100
	DSC5	Discipline - Specific Core Course	UBCA3002	Business Regulatory Framework	4	3	3	25	75	100
			UBCAAL31	Allied – Statistics with Computer Application I	4	3	3	25	75	100
	OEC5	Other Elective Course	UBCAAP31	Allied - Data Base Management System - Lab	4	3	3	25	75	100
	VBC3	Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#	1	1	1	_	25	25
	VBC3	(To choose 1 out of 2)	UBVBC302	4. Physical Education – Sports II#		'	'	-	25	25
				TOTAL	30	25	-	175	550	725
			UBFUR401	UBFUR401						
	GE7	Generic Elective	UBFAR401	UBFAR401	4	4	3	25	75	100
	GE1	(To choose 1 out of 4)	UBFHD401	UBFHD401	_ 4	4	3	23	/5	100
			UBFTA401	UBFTA401						
	GE8	Generic Elective	UBFEN401	UBFEN401	6	4	3	25	75	100
			UBTANM41	Ithazhiyal II						
	OEC6	Non-Major	UBURNM41	Basic Urdu II	2	1	3	25	75	100
	OECO	NOTI-Wajor	UBHDNM41	Basic Hindi II		'		23	/3	100
			UBARNM41	Basic Arabic II						
IV	DSC7	Discipline - Specific Core Course	UBCA4001	Corporate Accounting II	5	5	3	25	75	100
	DSC8	Discipline - Specific Core Course	UBCA4002	Corporate Law	4	4	3	25	75	100
	OEC7	Other Elective	UBCAAL41	Allied – Statistics with Computer Applications II	4	3	3	25	75	100
	OEC/	Course	UBCAAP41	Spread Sheet Applications - Lab	4	3	3	25	75	100
		Value-Based	UBVBC401	1. Cyber Security#						
	VBC4	Course (To choose 1 out of 2)	UBVBC402	2. Entrepreneurship#	1	1	1	-	25	25
	INT1	Apprenticeship / In	ternship and Rep	ort 30 hrs. per Semester	-	-	-	•	-	-
				TOTAL	30	25	-	175	550	725
	DSC10	Discipline - Specific Core	UBCA5001	Cost Accounting I	5	5	3	25	75	100

		Course								
V	DSC11	Discipline - Specific Core Course	UBCA5002	Management Accounting I	5	4	3	25	75	100
	DSC12	Discipline - Specific Core Course	UBCA5003	Enterprise Resource Planning (Theory)	5	4	3	25	75	100
	DSC13	Discipline - Specific Core Course	UBCA5004	Human Resource Management I	4	4	3	25	75	100
	DSC14	Discipline - Specific Core Course	UBCAPR51	Enterprise Resource Planning Software - Lab	4	3	3	25	75	100
			UBCADE51	Auditing with Digital     Tools						
	DSE1	Discipline- Specific Elective (To choose 1 out of 3)	UBCADE52	Customer Relationship     Management	5	4	3	25	75	100
			UBCADE53	3. Services Marketing						
		Skill	UBCASE51	Basic Numerical Skills						
	SEE1	Enhancement Elective Course (To choose 1	UBCASE52	Quantitatives     Techniques	2	1	3	25	75	100
		out of 3)	UBCASE53	3. Employability Skills						
	INT1	Apprenticeship /	/ Internship and	Report 30 hrs. per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC15	Discipline - Specific Core Course	UBCA6001	Cost Accounting II (B.Com, B.Com.CA, B.Com. F&A, BBA)	5	5	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBCA6002	Management Accounting II ( B.Com, B.Com.CA, B.Com. F&A, BBA)	5	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBCA6003	Computer Applications in Finance (Theory)	5	4	3	25	75	100
	DSC18	Discipline - Specific Core Course	UBCA6004	Entrepreneurial Development (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	3	3	25	75	100
	DSC19	Discipline - Specific Core Course	UBCA6005	Income Tax in Digital Era	4	3	6	25	75	100
		Discipline-Specific	UBCAPR61	Web Designing     for Business Management     Lab						
VI	DSE2	Elective (To choose 1 out of 3)	UBCAPR62	2. Visual Basics for Business - Lab	5	4	3	25	75	100
			UBCAPR63	Excel Modeling for     Business - Lab						
		Skill Enhancement	UBCASE61	1. E-Commerce (B.Com, B.Com.CA, B.Com. F&A, BBA)						
	SEE2	(To choose 1 out	UBCASE62	Personality Development     Lab	2	1	3	25	75	100
		of 3)	UBCASE63	3. Business Communications - Lab						
		Internship	UBCAPJ61	Apprenticeship / Internship &	_	30	3	25	75	100
				Report 30+30+30= 90##	_	30	,	20	, 5	100
	SEC 4	Skill Enhancement Course	UBEXAC61	Extension Activities 40°hrs	-	-	-	25	75	100

VBC5	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@	-	1	-	-	-	-
		TOTAL	30	55	-	225	675	900
		GRAND TOTAL	180	180	-	1075	3225	4400

The 90## hours of Apprenticeship/Internship/Project and 40° hours of Extension Activities shall be apart from the regular teaching hours. The Marks awarded for Extension Activities are included in the Grand Total but not considered for CGPA. \*Handled by the Department of English, \*\*Handled by the Major Department, #Handled by the Allied Department, @SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC is Mandatory for all UG programs, and an additional one credit is taken for the calculation of CGPA

COURSES	NO. OF COURSES	TOTAL CREDITS	MARKS	TOTAL MARKS
Generic Elective - Language & English (GE)	4	18	100	400
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	3	9	100	300
Other Elective Course – Allied (OEC)	9	28	100	900
Discipline - Specific Core Course (DSC)	19	78	100	1900
Discipline-Specific Elective (DSE)	2	8	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

#### PROGRAMME SPECIFIC OUTCOMES (PSOs):

#### By the end of the Programme, the Students will be able to

**PSO1:** Understand the principles of Communication and Business Management and be able to apply them in business contexts.

**PSO2:** Prepare Accounts of Various types of business entities in digital format.

**PSO3:** Draft proforma of Various Statements and Reports of Joint Stock Companies, Banking Companies using computer applications.

PSO4: Collect, Tabulate, Analyse, and interpret data using Statistical Tools and Software.

**PSO5:** Create and Manage databases for different types of organizations.

**PSO6:** Conduct Business by adhering to various Legal and Regulatory Guidelines in the Digital Era.

PSO7: Exhibit Entrepreneurship Skills.

**PSO8:** Apply Optimal Costing Methods for better decision-making.

**PSO9:** Apply Income Tax Provision to estimate the Tax Liability of Individuals and MSMEs.

PSO10: Perform Business Activities efficiently and effectively in the digital Era with the help

of ICT.

## MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program					Pro	gram O	utcomes (	POs)		
Specific Outcomes PSOs	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO2	✓	✓	✓	✓		✓			✓	
PSO3	✓	✓		✓		✓				
PSO4	✓	✓		✓		✓	✓		✓	
PSO5	✓	✓	✓	✓		✓				
PSO6	✓	✓						✓		✓
PSO7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO8	✓			✓		✓	✓	✓		
PSO9	✓	✓	✓	✓		✓		✓		
PSO10	✓	✓	✓	✓	✓	✓	✓		✓	
Number of Ma	atches =	64, Co	rrelation	n: High	•	•	•	•	•	•

#### **MAPPING BENCH MARK**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-30	31-60	61-70	71-100
Correlation	Poor	Moderate	High	Very High

				RE FOR B.Com. Finance nitted from the academic y							
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL	
			UBFUR101	Urdu I							
	054	Generic Elective	UBFAR101	Arabic I	6	5	3	25	75	100	
	GE1	(To choose 1 out of 4)	UBFHD101	Hindi I		5	3	25	75	100	
			UBFTA101	Tamil I							
	GE2	Generic Elective	UBFEN101	English I	4	4	3	25	75	100	
	AEC1	Ability Enhancement Course	UBVED101	Value Education *	2	1	3	25	75	100	
I	DSC1	Discipline - Specific Core Course	UBFA1001	Financial Accounting I (B.Com, B.Com.CA, B.Com. F&A, BBA)	7	6	3	25	75	100	
	SEC1	Skill Enhancement Course	UBSKB102	Professional Communication for Commerce and Management**	3	3	3	25	75	100	
	OEC1	Other Elective Course	UBFAAL11	Allied - Indian Economy	7	5	3	25	75	100	
	VBC1	Value-Based Course	UBVBC101	1. Moral Education#							
		(To choose 1 out of 2) [Online Exam]	UBVBC102	2. Physical Education – Yoga <sup>#</sup>	1	1	1	-	25	25	
				TOTAL	30	25	-	150	475	625	
			UBFUR201	Urdu II							
	GE3	Generic Elective (To choose 1	UBFAR201	Arabic II	6	5	3	25	75	100	
	GES	out of 4)	UBFHD201	Hindi II			3	23		100	
			UBFTA201	Tamil II							
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100	
	AEC2	Ability Enhancement Course	UBENV201	Environmental Studies *	2	1	3	25	75	100	
П	DSC2	Discipline - Specific Core Course	UBFA2001	Financial Accounting II	5	4	3	25	75	100	
	DSC3	Discipline - Specific Core Course	UBFA2002	Business Management (B.Com, B.Com.CA, B.Com. F&A, BBA)	4	3	3	25	75	100	
	OEC2	Other Elective Course	UBFAAL21	Allied - Goods and Services Tax	4	4	3	25	75	100	
	OEC3	Other Elective Course	UBFAAL22	Allied – Financial Markets	4	3	3	25	75	100	
	VBC2	Value-Based Course (To choose 1	UBVBC201	Physical Education -     Sports I <sup>#</sup>	1	1	1	_	25	25	
	- 3-	out of 2) [Online Exam]	UBVBC202	2. Health & Wellness#							
				TOTAL	30	25	-	175	550	725	

	DSC10	Discipline- Specific Core Course	UBFA5001	Cost Accounting I	5	5	3	25	75	100	
		Dissipling		TOTAL	30	25	-	175	550	725	
	INT1	Apprenticeship / In	ternship and Rep	oort 30 hrs. per Semester	-	-	-	-	-	-	
	VBC4	Course (To choose 1 out of 2)	UBVBC401 UBVBC402	Cyber Security#      Entrepreneurships#	1	1	1	-	25	25	
		Value-Based	UBFAAP42	Allied – Modern Banking	4	3	3	25	75	100	
	OEC7	Other Elective Course	UBFAAL41	Allied - Financial Planning	4	3	3	25	75	100	
	DSC8	Discipline - Specific Core Course	UBFA4002	Business Statistics	4	4	3	25	75	100	
IV	DSC7	Discipline - Specific Core Course	UBFA4001	Corporate Accounting II	5	5	3	25	75	100	
			UBARNM41	Basic Arabic II	1						
	OEC6	Non-Major	UBHDNM41	Basic Hindi II	2	1	3	25	75	100	
			UBURNM41	Basic Urdu II	1						
			UBTANM41	Ithazhiyal II	+ -						
	GE8	Generic Elective	UBFEN401	UBFEN401	6	4	3	25	75	100	
		of 4)	UBFTA401	UBFTA401	-						
	GE7	(To choose 1 out	UBFAR401 UBFHD401	UBFAR401 UBFHD401	4	4	3	25	75	100	
		Generic Elective	UBFUR401	UBFUR401	-						
			LIDEUD 404	TOTAL	30	25	-	175	550	725	
	VBC3	(To choose 1 out of 2)	UBVBC302	5. Physical Education – Sports II#	1	1	1	-	25	25	
	VPC2	Value-Based Course	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#		_	4		25	25	
	0203	Course	UBFAAL32	Allied – Business Law	4	3	3	25	75	100	
	OEC5	Other Elective	UBFAAL31	Allied - Business Economics	4	3	3	25	75	100	
Ш	DSC5	Discipline - Specific Core Course	UBFA3002	Business Research Methods	4	3	3	25	75	100	
	DSC4	Discipline - Specific Core Course	UBFA3001	Corporate Accounting I	5	5	3	25	75	100	
			UBARNM31	Basic Arabic I	1						
	OEC4	Non-Major	UBHDNM31	Basic Hindi I	2	1	3	25	75	100	
			UBURNM31	Basic Urdu I							
			UBTANM31	Ithazhiyal I							
	GE6			6	4	3	25	75	100		
			UBFTA301	UBFTA301	1						
	GE5	(To choose 1 out of 4)	UBFHD301	UBFHD301	4	4	3	25	75	100	
		Generic Elective	UBFAR301	UBFAR301							
			UBFUR301	UBFUR301							

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V	DSC11	Discipline- Specific Core Course	UBFA5002	Management Accounting I	5	4	3	25	75	100
	DSC12	Discipline- Specific Core Course	UBFA5003	Income Tax Law & Practice I	5	4	3	25	75	100
	DSC13	Discipline - Specific Core Course	UBFA5004	Human Resource Management( B.Com, B.Com.CA, B.Com. F&A, BBA)	5	4	3	25	75	100
	DSC14	Discipline - Specific Core Course	UBFAPR51	Computerised Accounting - Tally	3	3	3	25	75	100
		Discipline-	UBFADE51	International Finance						
	DSE1	Specific Elective (To choose 1	UBFADE52	Financial Reporting and Analysis	5	4	3	25	75	100
		out of 3)	UBFADE53	3 Practical Auditing						
		Skill	UBFASE51	Office Management						
	SEE1	Enhancement Elective Course	UBFASE52	Project Management	2	1	3	25	75	100
	OLL!	(To choose 1 out of 3)	UBFASE53	Training and     Development				20	70	100
	INT1	Apprenticeship / In	ternship and Re	eport 30 hrs. per Semester	-	-	-	-	-	-
				TOTAL	30	25	-	175	525	700
	DSC15	Discipline - Specific Core Course	UBFA6001	Cost Accounting II	5	5	3	25	75	100
	DSC16	Discipline - Specific Core Course	UBFA6002	Management Accounting II	5	4	3	25	75	100
	DSC17	Discipline - Specific Core Course	UBFA6003	Income Tax Law & Practice II	5	4	3	25	75	100
	DSC18	Discipline - Specific Core Course	UBFA6004	Entrepreneurial Development	5	3	3	25	75	100
	DSC19	Discipline - Specific Core Course	UBFAPR61	E- filing of Returns	3	3	3	25	75	100
		Discipline-	UBFADE61	Business Environment						
VI	DSE2	Specific Elective (To choose 1	UBFADE62	2. Organisational Behaviour	5	4	3	25	75	100
		out of 3)	UBFADE63	3 Investment Management						
		Skill Enhancement	UBFASE61	1. E-Commerce						
	SEE2	Elective Course	UBFASE62	2. Digital Marketing	2	1	3	25	75	100
		(To choose 1	UBFASE63	3 Logistics Management						
	INT1	out of 3) Internship	UBFAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC3	Value-Based Course	UBEXAC61	Extension Activities 40 <sup>α</sup> hrs	-	-	-	25	75	100
	VBC5	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC <sup>®</sup>	-	1	-	-	-	-
				TOTAL	30	55	-	225	675	900
				GRAND TOTAL	180	180	-	1075	3225	4400

COURSES	NO. OF	TOTAL	MARKS	TOTAL
COURSES	COURSES	CREDITS		MARKS
Generic Elective - Language & English (GE)	4	18	100	400
Ability Enhancement Course (AEC)	2	2	100	200
Value-Based Course (VBC)	5	5	25	100
Skill Enhancement Course (SEC)	3	9	100	300
Other Elective Course – Allied (OEC)	9	28	100	900
Discipline - Specific Core Course (DSC)	19	78	100	1900
Discipline-Specific Elective (DSE)	2	8	100	200
Skill Enhancement Elective Course (SEE)	2	2	100	200
Apprenticeship/Internship	1	30	100	100
Total	47	180		4400

#### **PSO: Program-Specific Outcome**

#### By the end of the Programme, the Students will be able to

- **PSO1** Acquire the Knowledge of principles of commerce in the context of finance and accounts.
- **PSO2** Understand the various accounting techniques and methods to adopt and practice these skills in various fields.
- **PSO3** Develop comprehension skills in tax and finance to become an expert consultant for business firms.
- **PSO4** Provide solutions for various economic issues in agriculture, Industries, and other allied sectors.
- **PSO5** Understand the statistical methods and techniques to solve various problems in another interdisciplinary arena, including research.
- **PSO6** Provide more exposure to modern aspects of the HR and Marketing field to develop decision-making skills.
- **PSO7** Entrepreneurial exposure to become young entrepreneurs and corporate professionals.
- **PSO8** Equip with Knowledge of legal framework in the context of the Business, company, and various industries.
- **PSO9** Understand the importance of Communication and writing necessary reports in the daily routine of Business.
- PSO10 Computer applications and computerized accounting, like e-filing and different tax return

## MAPPING OF PROGRAMME-SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program	Program Out Comes (POs)									
Specific Outcomes PSOs	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10
PSO1	1	1	1	1		1	1			1
PSO2	1	1	1	1	1	1	1			1
PSO3	1	1	1	1	1	1	1			
PSO4	1	1	1	1	1	1	1	1		1
PSO5	1	1	1	1	1	1	1			1
PSO6	1	1	1	1		1				1
PSO7	1	1	1	1	1	1	1	1		1
PSO8	1	1	1	1	1		1	1		1
PSO9	1	1	1	1		1		1	1	1
PSO10	1	1	1	1	1	1			1	1

#### **Mapping Bench Mark**

Mapping	1-30%	31-60%	61-70%	71-100%
Matches	1-30	31-60	61-70	71-100
Correlation	Poor	Moderate	High	Very High