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

16th ACADEMIC COUNCIL MEETING
(For the UG & PG Candidates Admitted from 2022-2023)

14th JULY 2022

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 HayathBasha 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 for 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 up to 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 3rd 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 centers 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 in the educational map of India. The College keeps its portals open to the 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 inter-disciplinary 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 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 rules in force.

3. ELIGIBILITY FOR THE AWARD OF 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 fulfilled 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 semester, the second academic year: the third semesters and fourth semester 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 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 and
                Skill Enhancement Courses

6. EXTENSION ACTIVITIES

All the students shall have to enroll 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 31st March in a year. If a student lacks 40 hours of attendance in the First year, he has to compensate 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 are100, it is divided into 75 for External Activities (outside college campus) and 25 for Internal Activities (inside college campus) and the passing minimum is 40%. It is not taken into account for calculating 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 hour's duration for 75 marks
CIA Test II: Three hours duration for 75 marks

Marks Distribution	Theory & Practical
CIA Test Marks 150 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 - 75	Test II - 75	Total - 150	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

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 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 of 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 the 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 the 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 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 in all the papers and practicals, wherever prescribed / as per the scheme of examinations, by earning 180 CREDITS. He shall also fulfill 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	O	10
86 – 95	A+	9
76 – 85	A	8
66 – 75	B+	7
56 – 65	B	6
50 – 55	C	5
40 – 49	P	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 **CGPA 7.5 and above without any arrear** : **First Class with Distinction**
Passed all the courses with **CGPA 6 to 7.4** : **First Class**
Passed all the courses with **CGPA 5 to 5.9** : **Second Class**
Passed all the courses with **CGPA 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.

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

$$\textbf{CGPA} = \frac{\sum_n \sum_i C_{ni} \ G_{ni}}{\sum_n \sum_i C_{ni}}$$

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

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. The 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 note books may be permitted to take the Practical Examinations provided the Head of the Department and the Course Teacher concerned certifies 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 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 in 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, and Viva-voce and field work.

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 is mandatory and the certificate of completion of MOOC is to be enclosed along with the dissertation at the time of its submission

18. SELF-SUPPORTIVE COURSES

The above Regulations shall be applicable for candidates undergoing the respective self-supportive 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.

20. 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:

1. 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 an 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 of 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.

4. 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	Total Marks	
Apprenticeship/Internship and Project Report	90 hours (Beyond Regular Teaching hours)	30	Viva	Project
			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 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 COURSES

Section A	To answer All the 10 questions (Two questions from each UNIT)	10 x 2 = 20 Marks
Section B	To answer ALL the 5 questions (either or type) (One question from each UNIT)	5 x 5 = 25 Marks
Section C	To answer 3 questions (out of 5 questions) (One question from each UNIT)	3 x10 =30 Marks
TOTAL		**75 Marks**

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 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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				B.A. ENGLSIH						
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**25**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBEN2001	Fiction	5	4	3	25	75	100
	DSC3	Discipline Specific Core Course	UBEN2002	English Prose	4	3	3	25	75	100
	OEC2	Other Elective Course	UBENAL21	Allied – The History of English Literature(1350-1850)	5	4	3	25	75	100
	OEC3	Other Elective Course	UBENAL22	Allied –The Social History of England	3	3	3	25	75	100
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education – Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						

III	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
			UBHDNM31	Basic Hindi I						
			UBTANM31	Ithazhiyal I						
	DSC4	Discipline Specific Core Course	UBEN3001	English Drama	5	4	3	25	75	100
	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 Course	UBENAL32	Allied – New Criticism in Contemporary Literature	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education – Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM41	Basic Urdu II	2	1	3	25	75	100
			UBARNM41	Basic Arabic II						
			UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	DSC6	Discipline Specific Core Course	UBEN4001	Shakespeare	6	5	3	25	75	100
	DSC7	Discipline Specific Core Course	UBEN4002	American Literature	3	3	3	25	75	100
	OEC8	Other Elective Course	UBENAL41	Allied – The History of English Language	5	3	3	25	75	100
	OEC9	Other Elective Course	UBENAL42	Allied – American Literary History	3	3	3	25	75	100
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
	DSC8	Discipline Specific Core Course	UBEN5001	Twentieth Century Literature I	5	4	3	25	75	100
	DSC9	Discipline Specific 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

Sem		Type	Course Code	Title						
V	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
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBENDE51	1. Literary Movements in English	5	4	3	25	75	100
			UBENDE52	2. Nature Environment and Literature						
			UBENDE53	3. Modern Linguistics						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBENSE51	1. English for Competitive Examinations I	2	1	3	25	75	100
			UBENSE52	2. English for Communication						
			UBENSE53	3. Computer Literacy						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBENDE61	1. Studying English Literature	5	3	3	25	75	100
			UBENDE62	2. The Great Women Writers in the World Literature						
			UBENDE63	3. Interpreting Drama						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBENSE61	1. English for Competitive Examinations II	2	1	3	25	75	100
			UBENSE62	2. Business Writing in English						
			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$^\alpha$ 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$^\alpha$ 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 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 Specific Outcomes	PROGRAMME OUTCOMES									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO2	✓	✓		✓	✓	✓	✓	✓		
PSO3	✓	✓	✓	✓	✓	✓	✓	✓		
PSO4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO5	✓	✓		✓	✓	✓	✓	✓	✓	
PSO6	✓	✓	✓	✓	✓	✓		✓		
PSO7	✓	✓	✓	✓	✓	✓	✓	✓		✓
PSO8	✓	✓	✓	✓	✓	✓	✓		✓	✓
Number of matches = 68, 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 (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 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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				COURSE STRUCTURE OF B.A. HISTORY PROGRAMME						
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	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 choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**25**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	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
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	-	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**

III	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective **Course (To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
			UBHDNM31	Basic Hindi I						
			UBTANM31	Ithazhiyal I						
	DSC4	Discipline Specific Core Course	UBHI3001	History of India from CE 1526 to 1707	5	4	3	25	75	100
	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
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education - Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM41	Basic Urdu II	2	1	3	25	75	100
			UBARNM41	Basic Arabic II						
			UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	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
	VBC4	Value-Based **Course (To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
	DSC8	Discipline Specific Core Course	UBHI5001	History of India from CE 1857 to 1947	5	4	3	25	75	100

Sem										
V	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
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBHIDE51	1. Intellectual History of Modern India	5	4	3	25	75	100
			UBHIDE52	2. History of Science and Technology in India from CE 1750 to 1900						
			UBHIDE53	3. Select Constitutions						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBHISE51	1. General Knowledge	2	1	3	25	75	100
			UBHISE52	2. Introduction to Archaeology						
			UBHISE53	3. Introduction to Museology						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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	Muslims Contribution to Humanity	4	4	3	25	75	100
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBHIDE61	1. Intellectual History of Modern Tamil Nadu	5	3	3	25	75	100
			UBHIDE62	2. History of Science and Technology in India from CE 1900 to 2014						
			UBHIDE63	3. Indian Constitution						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBHISE61	1.Competitive Examinations	2	1	3	25	75	100
			UBHISE62	2. Introduction to Epigraphy and Numismatics						
			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$^{\alpha}$ 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$^{\alpha}$ 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 (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,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 view points.
PSO 5	Recognize the varied historical narratives from various of sources and critically interpret narratives with the capacity to effectively communicate individual opinion.
PSO 6	Interpret the implication of the past on the present and acknowledge its relevance in the 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 Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓		✓		✓	✓	✓	✓
PSO2	✓	✓	✓			✓		✓		
PSO3		✓	✓	✓	✓		✓		✓	✓
PSO4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO6		✓	✓	✓	✓	✓	✓		✓	✓
PSO7		✓	✓	✓	✓	✓	✓		✓	✓
PSO8	✓	✓	✓		✓	✓		✓		
Number of Matches = 62 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 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 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   Plan, execute, and manage a Project after careful appraisal

PO8   Develop products, Frame Policies, and/or collaborate to help Society in increasing the living standards and towards 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

				BACHELOR OF BUSINESS ADMINISTRATION [B.B.A]						
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBBA1001	Financial Accounting (Common to 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	UBBAAL11	Allied - Business Statistics	7	5	3	25	75	100
	VBC1	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	30	25	-	150	450	625
II	GE3	Generic Elective (To choose 1 out of 4)	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBBA2001	Business Environment	5	4	3	25	75	100
	DSC3	Discipline Specific Core Course	UBBA2002	Business Management (Common to B.Com, B.Com.CA, B.Com.F& A, BBA)	4	3	3	25	75	100
	OEC2	Other Elective Course	UBBAAL21	Allied - Operations Research	4	4	3	25	75	100
	OEC3	Other Elective Course	UBBAAL22	Allied - Consumer Behaviour	4	3	3	25	75	100
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	30	25	-	175	525	725
	DSC4	Discipline Specific Core Course	UBBA3001	Strategic Management	5	4	3	25	75	100
	DSC5	Discipline Specific Core Course	UBBC3002	Business Regulatory Framework (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	4	3	25	75	100

Sem	Code	Course Type	Paper Code	Title						
III	DSC6	Discipline Specific Core Course	UBBA3003	Modern Marketing (Common to B.Com, B.Com.CA, B.Com. F &A, BBA)	4	4	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 3)**	UBBANM31	Business Organisation	4	2	3	25	75	100
			UBBANM32	Customer Relationship Management						
			UBBANM33	Supply Chain Management						
	OEC5	Other Elective Course	UBBAAL31	Allied – Business Taxation	5	4	3	25	75	100
	OEC6	Other Elective Course	UBBAAL32	Allied – Business Economics (Common to B.Com, B.Com.CA, B.Com. F &A, BBA)	3	3	3	25	75	100
	SEC2	Skill Enhancement Lab Course	UBBCSEP3	Lab- Tally Basics	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	**(online exam)**		25
			UBVBC302	2. Physical Education – Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	DSC7	Discipline Specific Core Course	UBBA4001	Production & Materials Management	5	4	3	25	75	100
	DSC8	Discipline Specific Core Course	UBBA4002	Company Law (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	4	3	25	75	100
	DSC9	Discipline Specific Core	UBBA4003	Modern Banking (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	4	4	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 3)**	UBBANM41	International Business	4	2	3	25	75	100
			UBBANM42	Logistic Management						
			UBBANM43	Brand Management						
	SEC3	Skill Enhancement Lab Course	UBBCSEP4	Lab- Tally- Advanced	3	3	3	25	75	100
	OEC8	Other Elective Course	UBBAAL41	Allied – Organisational Behaviour	5	4	3	25	75	100
	OEC9	Other Elective Course	UBBAAL42	Allied - Training and Development	3	3	3	25	75	100
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	**(online exam)**		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
V	DSC10	Discipline Specific Core Course	UBBA5001	Accounting for Managerial Decisions	5	5	3	25	75	100
	DSC11	Discipline Specific Core Course	UBBA5002	Financial Management	5	4	3	25	75	100
	DSC12	Discipline Specific Core Course	UBBA5003	Export Management	5	4	3	25	75	100
	DSC13	Discipline Specific Core Course	UBBA5004	Human Resource Management (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	4	3	25	75	100
	DSC14	Discipline Specific Core Course	UBBA5005	Total Quality Management	3	3	3	25	75	100

	Code	Course Type	Course Code	Course Title						
	DSE1	Discipline-Specific Elective (To choose 1 out of 3)	UBBADE51	1. Retail Management	5	4	3	25	75	100
			UBBADE52	2. Services Marketing						
			UBBADE53	3 . Time Management						
	SEE1	Skill Enhancement Elective Course (To choose 1 out of 3)	UBBASEP5	1. MS- Office- Basics – (Lab)	2	1	3	25	75	100
			UBBASE52	2. SPSS – Basics						
			UBBASE53	3. DBMS- Basics						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	DSC15	Discipline Specific Core Course	UBBA6001	Marketing Research	5	5	3	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	5	4	3	25	75	100
	DSC18	Discipline Specific Core Course	UBBA6004	Entrepreneurial Development (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	3	3	25	75	100
	DSC19	Discipline Specific Core Course	UBBA6005	Digital Marketing	3	3	3	25	75	100
	DSE2	Discipline-Specific Elective (To choose 1 out of 3)	UBBADE61	1. E-Commerce (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	4	3	25	75	100
			UBBADE62	2. Change Management						
			UBBADE63	3. Business Ethics						
	SEE2	Skill Enhancement Elective Course (To choose 1 out of 3)	UBBASEP6	1. MS-Office- Advanced – (Lab)	2	1	3	25	75	100
			UBBASE62	2. SPSS-Advanced						
			UBBASE63	3. DBMS- Advanced						
	INT1	Internship	UBBAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC2	Skill Enhancement Course	UBEXAC61	Extension Activities 40α 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 40α 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 Bachelors 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 potentials to accomplish professional tasks independently, as a team member and/or team leader.

PSO6: Develop products and services; collaborate with organizations to help society in increasing the living standards and building a sustainable environment.

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

PSO8: Use online / offline information & communication tools and technologies and develop passion for lifelong learning through MOOCS, ODL, and self learning techniques.

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**

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

PSOs (BBA)	POs (B.Com/BBA)										TOTAL (80)
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	
PSO1	✓	✓	✓	✓	✓	✓	✓	✓		✓	9
PSO2	✓	✓	✓	✓	✓	✓	✓	✓		✓	9
PSO3	✓	✓	✓	✓	✓	✓	✓	✓		✓	9
PSO4		✓	✓	✓	✓		✓	✓	✓	✓	8
PSO5		✓	✓	✓	✓	✓	✓	✓	✓		8
PSO6	✓	✓	✓		✓		✓	✓	✓		7
PSO7	✓	✓	✓		✓	✓	✓		✓	✓	8
PSO8	✓	✓	✓			✓	✓	✓	✓		7
TOTAL	6	8	8	5	7	6	8	7	5	5	65
No. of Matches = 65 | Mapping = 80%					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 (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, 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

BACHELOR OF COMPUTER APPLICATIONS [B.C.A]										
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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
	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 - Computer Oriented Statistical Methods I	5	5	3	25	75	100
		Other Elective Course		Allied - Computer Oriented Statistical Methods Lab I	3	-	-	-	-	-
	VBC1	Value-Based **Course (To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	30	22	-	150	450	625
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	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	UBCCAL21	Allied - Computer Oriented Statistical Methods II	4	5	3	25	75	100
	OEC3	Other Elective Course	UBCCAP21	Allied - Computer Oriented Statistical Methods - Lab II	4	3	3	25	75	100
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	30	28	-	175	525	725
III	DSC4	Discipline Specific Core Course	UBCC3001	C++ & Data Structures	5	4	3	25	75	100
	DSC5	Discipline Specific Core Course	UBBC3002	Enterprise Resource Planning	5	4	3	25	75	100

			Code	Title						
	DSC6	Discipline Specific Core Course	UBCCPR31	C++ & Data Structures - Lab	3	3	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 3)**	UBURNM31	1. Computer Graphics	4	2	3	25	75	100
			UBARNM32	2. Computer Architecture						
			UBHDNM33	3. System Analysis and Design						
	OEC5	Other Elective Course **(To choose 1 out of 2)**	UBCCAL31	Computer Oriented Accounts I	6	5	3	25	75	100
			UBCCAL32	Discrete Mathematics I						
	OEC6	Other Elective Course **(To choose 1 out of 2)**	UBCCAP31	Computer Oriented Accounts - Lab I	3	3	3	25	75	100
			UBCCAP32	Discrete Mathematics I - Lab						
	SEC2	Skill Enhancement Course	UBBCSE31	Computer Graphics & Multimedia	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education – Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	DSC7	Discipline Specific Core Course	UBCC4001	Programming in Java	5	4	3	25	75	100
	DSC8	Discipline Specific Core Course	UBCC4002	Programming in Python	5	4	3	25	75	100
	DSC9	Discipline Specific Core Practical	UBCCPR41	Programming in Java - Lab	3	3	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 3)**	UBURNM41	1. Object Oriented Analysis and Design	4	2	3	25	75	100
			UBARNM42	2. Theory of Computation						
			UBHDNM43	3. Principles of Programming Languages						
	SEC3	Skill Enhancement Course	UBBCSEP4	Programming in Python - Lab	3	3	3	25	75	100
	OEC8	Other Elective Course **(To choose 1 out of 2)**	UBCCAL41	Allied - Computer Oriented Accounts II	6	5	3	25	75	100
			UBCCAL42	Discrete Mathematics II						
	OEC9	Other Elective Course **(To choose 1 out of 2)**	UBCCAP41	Allied - Computer Oriented Accounts Lab II	3	3	3	25	75	100
			UBCCAP42	Discrete Mathematics II - Lab						
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
V	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
	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

Sem		Course	Code	Title	Hrs	Cr	Dur	CIA	ESE	Total
V	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCCDE51	1. Programming in R	5	4	3	25	75	100
			UBCCDE52	2. Deep Learning						
			UBCCDE53	3 Digital Image Processing						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCCSE51	1. Programming in R Lab	2	1	3	25	75	100
			UBCCSE52	2. Deep Learning Lab						
			UBCCSE53	3. Cloud Computing						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	DSC15	Discipline Specific Core Course	UBCC6001	Database Management Systems	6	5	3	25	75	100
	DSC16	Discipline Specific Core Course	UBCC6002	Software Engineering	6	4	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 Management Systems - Lab	3	3	6	25	75	100
	DSC18	Discipline Specific Core Course	UBCCPR62	Mobile Application Development				25	75	100
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCCDE61	1. Big Data and Analytics	5	4	3	25	75	100
			UBCCDE62	2. Open Source Programming						
			UBCCDE63	3. Business Inteligence and Analytics						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCCSE61	1. Big Data and Analytics Lab	2	1	3	25	75	100
			UBCCSE62	2. Open Source Programming Lab						
			UBCCSE63	3. Business Inteligence and Analytics - Lab						
	INT1	Internship	UBCCPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC5	Skill Enhancement Course	UBEXAC61	Extension Activities 40α 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 40α 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)	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) 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: Identify, formulate and analyze complex real-life problems in terms of mathematical modeling 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 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 in an ethical way, keeping in the 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 technical community
PSO9	Individual and Team work: Ability to work in hierarchical team both as a member and leader.
PSO10	Innovation and entrepreneurship: Ability to apply innovative ideas to become a entrepreneur.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓			✓	✓	✓			
PSO2	✓		✓	✓	✓		✓			
PSO3	✓	✓	✓	✓			✓			
PSO4	✓	✓	✓	✓			✓	✓		
PSO5	✓				✓	✓	✓	✓	✓	
PSO6	✓	✓	✓	✓	✓		✓	✓		✓
PSO7	✓				✓	✓	✓	✓	✓	
PSO8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO9	✓				✓			✓	✓	
PSO10	✓				✓	✓	✓	✓		✓
Number of matches = 61, 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

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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 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   Plan, execute, and manage a Project after careful appraisal

PO8   Develop products, Frame Policies, and/or collaborate to help Society in increasing the living standards and towards 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 COMMERCE										
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective (To choose 1 out of 4)	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBCO1001	Financial Accounting I (Common to 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 Business Organisation	7	5	3	25	75	100
	VBC1	Value-Based Course (To choose 1 out of 2)	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**25**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective (To choose 1 out of 4)	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBCO2001	Financial Accounting II (Common to B.Com, B.Com.CA, B.Com.F &A, BBA)	5	4	3	25	75	100
	DSC3	Discipline Specific Core Course	UBCO2002	Business Management (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	3	3	25	75	100
	OEC2	Other Elective Course	UBCOAL21	Allied - Leadership and Team Development	4	4	3	25	75	100
	OEC3	Other Elective Course	UBCOAP21	Allied - Computer Applications in Business - Lab	4	3	3	25	75	100
	VBC2	Value-Based Course (To choose 1 out of 2)	UBVBC201	1. Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
	DSC4	Discipline Specific Core Course	UBCO3001	Corporate Accounting I (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	5	4	3	25	75	100

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III	**DSC5**	Discipline Specific Core Course	UBCO3002	Business Regulatory Framework (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	DSC6	Discipline Specific Core Course	UBCO3003	Modern Marketing (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 3)**	UBCONM31	Business And Professional Ethics	4	2	3	25	75	100
			UBCONM32	Marketing Communications						
			UBCONM33	Customer Relationship Management						
	OEC5	Other Elective Course	UBCOAL31	Allied – Business Statistics and Operations Research I	5	4	3	25	75	100
	OEC6	Other Elective Course	UBCOAL32	Allied – Business Economics (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	3	3	25	75	100
	SEC2	Skill Enhancement Lab Course	UBCOSEP3	Computerised Accounting I - Lab	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	**(online exam)**		25
			UBVBC302	2. Physical Education - Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	**DSC7**	Discipline Specific Core Course	UBCO4001	Corporate Accounting II (Common to B.Com, B.Com.CA, B.Com.F &A, BBA)	5	4	3	25	75	100
	DSC8	Discipline Specific Core Course	UBCO4002	Company Law (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	DSC9	Discipline Specific Core	UBCO4003	Modern Banking (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	OEC7	Other Elective **Course (To choose 1 out of 3)**	UBCONM41	Project Management	4	2	3	25	75	100
			UBCONM42	Retail Management						
			UBCONM43	Consumer Protection Act						
	SEC3	Skill Enhancement Lab Course	UBCOSEP4	Computerised Accounting II - Lab	3	3	3	25	75	100
	OEC8	Other Elective Course	UBCOAL41	Allied – Business Statistics and Operations Research II	5	4	3	25	75	100
	OEC9	Other Elective Course	UBCOAL42	Allied – Goods and Services Tax	4	3	3	25	75	100
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	**(online exam)**		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
V	**DSC10**	Discipline Specific Core Course	UBCO5001	Cost Accounting I (Common to 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 (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	4	3	25	75	100
	DSC12	Discipline Specific Core Course	UBCO5003	Income Tax Law & Practice I	5	4	3	25	75	100

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Sem		Type	Paper Code	Course Title						
	DSC13	Discipline Specific Core Course	UBCO5004	Human Resource Management (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	DSC14	Discipline Specific Core Course	UBCO5005	Financial Management	4	3	3	25	75	100
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCODE51	1. Business Environment	5	4	3	25	75	100
			UBCODE52	2. Investment Management						
			UBCODE53	3. Personal Finance						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCOSE51	1. Commerce Practical - Lab	2	1	3	25	75	100
			UBCOSE52	2. Digital Marketing						
			UBCOSE53	3. Personality and Career Development						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	DSC15	Discipline Specific Core Course	UBCO6001	Cost Accounting II (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	5	3	25	75	100
	DSC16	Discipline Specific Core Course	UBCO6002	Management Accounting II (Common to B.Com, B.Com.CA, B.Com. F & A, BBA)	5	4	3	25	75	100
	DSC17	Discipline Specific Core Course	UBCO6003	Income Tax Law & Practice II	5	4	3	25	75	100
	DSC18	Discipline Specific Core Course	UBCO6004	Entrepreneurial Development (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	3	3	25	75	100
	DSC19	Discipline Specific Core Course	UBCO6005	Practical Auditing	4	3	6	25	75	100
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCODE61	1. Digital Financial Services	5	4	3	25	75	100
			UBCODE62	2. Corporte Social Responsibility and Sustainablity Reporting						
			UBCODE63	3. Export Management						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCOSE61	1. E-Commerce (Common to B.Com, B.Com.CA, B.Com, F & A, BBA)	2	1	3	25	75	100
			UBCOSE62	2. Employability skills						
			UBCOSE63	3. Stock and Securities Trading						
	INT1	Internship	UBCOPJ61	Apprenticeship / Internship & Report 30+30+30= 90[##]	-	30	3	25	75	100
	SEC4	Skill Enhancement Course	UBEXAC61	Extension Activities 40[α] hrs	-	-	-	25	75	100
	VBC6	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**

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 for B.COM.

PSO1 Prepare Accounts for the purpose of evaluating business/organization/corporate firms & their operations and assist in Business Decision Making for increasing profitability, decreasing costs, selection from various alternatives and Reporting the statements, using computers & Software effectively.

PSO2 Develop Entrepreneurial intent, skills, abilities and make students capable of Communicating, Organising & Managing Business operations, especially its Accounting and Finances, Human Resources, 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 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 operation of Business, 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 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

Programme Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✔	✔	✔	✔		✔			✔	✔
PSO2	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
PSO3	✔	✔	✔	✔	✔	✔	✔	✔	✔	
PSO4	✔	✔	✔		✔	✔	✔			
PSO5		✔	✔	✔				✔		✔
PSO6	✔	✔	✔							✔
PSO7	✔	✔	✔		✔	✔			✔	✔
PSO8	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Number of matches = 58, 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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				COURSE STRUCTURE FOR B.Com. [COMPUTER APPLICATIONS] PROGRAMME						
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBCA1001	Financial Accounting I (Common to 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	UBCAAL11	Allied - Information Technology for Business (Theory)	7	5	3	25	75	100
	VBC1	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	**(Online Exam)**		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**25**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBCA2001	Financial Accounting II (Common to B.Com, B.Com.CA, B.Com. F& A, BBA)	5	4	3	25	75	100
	DSC3	Discipline Specific Core Course	UBCA2002	Business Management (Common to B.Com, B.Com.CA, B.Com. F& A, BBA)	4	3	3	25	75	100
	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 choose 1 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	1	**(online exam)**		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**

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III	DSC4	Discipline Specific Core Course	UBCA3001	Corporate Accounting I (Common to 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 (Common to B.Com, B.Com.CA, B.Com. F& A, BBA)	4	4	3	25	75	100
	DSC6	Discipline Specific Core Course	UBCA3003	Modern Marketing (Common to B.Com, B.Com.CA, B.Com. F& A, BBA)	4	4	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 3)**	UBCANM31	Indian Constitution	4	2	3	25	75	100
			UBCANM32	International Business						
			UBCANM33	Data Science for Business						
	OEC5	Other Elective Course	UBCAAL31	Allied – Statistics with Computer Application I	5	4	3	25	75	100
	OEC6	Other Elective Course	UBCAAL32	Allied – Business Economics (Common to B.Com, B.Com.CA, B.Com.F A, BBA)	4	3	3	25	75	100
	SEC2	Skill Enhancement Lab Course	UBCASEP3	Data Base Management System - Lab	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#	1	1	1	**(online exam)**		25
			UBVBC302	2. Physical Education - Sports II#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	DSC7	Discipline Specific Core Course	UBCA4001	Corporate Accounting II (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	5	4	3	25	75	100
	DSC8	Discipline Specific Core Course	UBCA4002	Company Law (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	DSC9	Discipline Specific Core	UBCA4003	Modern Banking (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 3)**	UBCANM41	Insurance in Digital Era	4	2	3	25	75	100
			UBCANM42	Computarized Financial Management						
			UBCANM43	Operations Research with Computer Applications						
	SEC3	Skill Enhancement Lab Course	UBCASEP4	Spread Sheet Applications - Lab	3	3	3	25	75	100
	OEC8	Other Elective Course	UBCAAL41	Allied – Statistics with Computer Applications II	5	4	3	25	75	100
	OEC9	Other Elective Course	UBCAAL42	Allied – Management Informations System	4	3	3	25	75	100
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security#	1	1	1	**(online exam)**		25
			UBVBC402	2. Entrepreneurship#						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
	DSC10	Discipline Specific Core Course	UBCA5001	Cost Accounting I (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	5	5	3	25	75	100
	DSC11	Discipline Specific Core	UBCA5002	Management Accounting I (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	5	4	3	25	75	100

V				Course						
	DSC12	Discipline Specific Core Course	UBCA5003	Enterprise Resourse Planning (Theory)	5	4	3	25	75	100
	DSC13	Discipline Specific Core Course	UBCA5004	Human Resource Management I (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	DSC14	Discipline Specific Core Course	UBCAPR51	Enterprise Resourse Planning Software - Lab	4	3	3	25	75	100
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCADE51	1. Auditing with Digital Tools	5	4	3	25	75	100
			UBCADE52	2. Customer Relationship Management						
			UBCADE53	3. Services Marketing						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCASE51	1. Basic Numerical Skills	2	1	3	25	75	100
			UBCASE52	2. Quantitatives Techniques						
			UBCASE53	3. Employability Skills						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	DSC15	Discipline Specific Core Course	UBCA6001	Cost Accounting II (Common to 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 (Common to 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 (Common to 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
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCAPR61	1. Web Desining for Business Management - Lab	5	4	3	25	75	100
			UBCAPR62	2. Visual Basics for Business - Lab						
			UBCAPR63	3. Excel Modeling for Business - Lab						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCASE61	1. E-Commerce (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	2	1	3	25	75	100
			UBCASE62	2. Personality Development - Lab						
			UBCASE63	3. Business Communications - Lab						
	INT1	Internship	UBCAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC 4	Skill Enhancement Course	UBEXAC61	Extension Activities 40α 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 40α 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)	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, Business Management and 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 data base for different types of organisations.

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 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 Specific Outcomes PSOs	Program Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO2	✓	✓	✓	✓		✓			✓	
PSO3	✓	✓		✓		✓				
PSO4	✓	✓		✓		✓	✓		✓	
PSO5	✓	✓	✓	✓		✓				
PSO6	✓	✓						✓		✓
PSO7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO8	✓			✓		✓	✓	✓		
PSO9	✓	✓	✓	✓		✓		✓		
PSO10	✓	✓	✓	✓	✓	✓	✓		✓	
Number of Matches = 64 , Correlation: 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

<table>
<tr><th colspan="11" align="center">B.Com. FINANCE & ACCOUNTS</th></tr>

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBFA1001	Financial Accounting I (Common to 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 **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	\multicolumn{2}{c}{(online exam)}	25
			UBVBC102	2.Physical Education – Yoga#						
				TOTAL	**30**	**25**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBFA2001	Financial Accounting II	5	4	3	25	75	100
	DSC3	Discipline Specific Core Course	UBFA2002	Business Management (Common to 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 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	1	\multicolumn{2}{c}{(online exam)}	25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
	DSC4	Discipline Specific Core Course	UBFA3001	Corporate Accounting I	5	4	3	25	75	100
	DSC5	Discipline	UBFA3002	Business Regulatory	4	4	3	25	75	100

III		Specific Core Course		Framework (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)						
	DSC6	Discipline Specific Core Course	UBFA3003	Modern Marketing (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 3)**	UBFANM31	Insurance and Risk Management	4	2	3	25	75	100
			UBFANM32	Business Ethics						
			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 (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	3	3	25	75	100
	SEC2	Skill Enhancement Course	UBFASE31	Financial Management	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education - Sports II#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	DSC7	Discipline Specific Core Course	UBFA4001	Corporate Accounting II	5	4	3	25	75	100
	DSC8	Discipline Specific Core Course	UBFA4002	Company Law (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	5	4	3	25	75	100
	DSC9	Discipline Specific Core	UBFA4003	Modern Banking (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	4	4	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 3)**	UBFANM41	Operations Research	4	2	3	25	75	100
			UBFANM42	Financial Planning						
			UBFANM43	Public Finance						
	SEC3	Skill Enhancement Course	UBBCSE41	Business Computer Applications	3	3	3	25	75	100
	OEC8	Other Elective Course	UBFAAL41	Allied – Business Statistics II	5	4	3	25	75	100
	OEC9	Other Elective Course	UBFAAL42	Allied – Business Research Methodology	3	3	3	25	75	100
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security#	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship#						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
V	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
	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 (Common to 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
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBFADE51	1. International Finance	5	4	3	25	75	100
			UBFADE52	2. Financial Reporting and Analysis						
			UBFADE53	3 Practical Auditing						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBFASE51	1. Office Management	2	1	3	25	75	100
			UBFASE52	2. Project Management						
			UBFASE53	3. Training and Development						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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 (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	5	3	3	25	75	100
	DSC19	Discipline Specific Core Course	UBFAPR61	E- filing of Returns	3	3	3	25	75	100
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBFADE61	1. Business Environment	5	4	3	25	75	100
			UBFADE62	2. Organisational Behaviour						
			UBFADE63	3 Investment Management						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBFASE61	1. E-Commerce (Common to B.Com, B.Com.CA, B.Com.F & A, BBA)	2	1	3	25	75	100
			UBFASE62	2. Digital Marketing						
			UBFASE63	3 Logistics Management						
	INT1	Internship	UBFAPJ61	Apprenticeship / Internship & Report 30+30+30= 90##	-	30	3	25	75	100
	SEC3	Value-Based Course	UBEXAC61	Extension Activities 40^α 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^α 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)	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 the comprehension skills in the area of tax, and finance to become an expert, consultant for business firms.

PSO4   Provide solutions for various economic issues in the field of agriculture, Industries, and other allied sectors

PSO5   Understand the statistical methods and techniques to solve various problems relating to another interdisciplinary arena including research

PSO6   Provide more exposure to modern aspects of HR and Marketing field so as 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 training will enable them to solve accounting problems.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program Specific Outcomes PSOs	Program Out Comes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	√	√	√	√		√	√			√
PSO2	√	√	√	√	√	√	√			√
PSO3	√	√	√	√	√	√	√			
PSO4	√	√	√	√	√	√	√	√		√
PSO5	√	√	√	√	√	√	√			√
PSO6	√	√	√	√		√				√
PSO7	√	√	√	√	√	√	√	√		√
PSO8	√	√	√	√	√		√	√		√
PSO9	√	√	√	√		√		√	√	√
PSO10	√	√	√	√	√	√			√	√
Number of Matches 78, Correlation: Very 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

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. evelop 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.

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				COURSE STRUCTURE FOR B.Sc. MATHEMATICS PROGRAMME						
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBMS1001	Algebra & Calculus	3	3	3	25	75	100
		Discipline Specific Core Practical		Mathematical Computations - Lab	3	-	-	-	-	-
	SEC1	Skill Enhancement Course	UBSKB103	Professional Communication for Physical Sciences**	3	3	3	25	75	100
	OEC1	Other Elective Course	UBMSAL11	1. Allied - Numerical Approximations -I	5	5	3	25	75	100
			UBMSAL12	2. Allied - Physics - I						
		Other Elective Course		1. Allied Practical - Numerical Computations - Lab	3	-	-	-	-	-
				2. Allied Practical - Physics						
	VBC1	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	**(Online Exam)**		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBMS2001	Geometry & Trigonometry	6	6	3	25	75	100
	DSC3	Discipline Specific Core Course	UBMSPR21	Mathematical Computations - Lab	3	3	3	25	75	100
	OEC2	Other Elective Course	UBMSAL21	1. Allied - Numerical Approximations - II	5	5	3	25	75	100
			UBMSAL22	2. Allied - Physics-II						
	OEC3	Other Elective Course	UBMSAP21	1. Allied Practical - Numerical Computations - Lab	3	3	3	25	75	100
			UBMSAP22	2. Allied Practical - Physics						
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education - I#	1	1	1	**(Online Exam)**		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**28**	**-**	**175**	**525**	**725**

Sem	Part	Course Type	Code	Title	Hours	Credits	Exam	CIA	ESE	Total
III	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
			UBHDNM31	Basic Hindi I						
			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
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	**(Online Exam)**		25
			UBVBC302	2. Physical Education -II[#]						
				TOTAL	30	25	-	175	525	725
IV	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM41	Basic Urdu II	2	1	3	25	75	100
			UBARNM41	Basic Arabic II						
			UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	DSC6	Discipline 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
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	**(Online Exam)**		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	30	25	-	175	525	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

Sem		Type	Code	Title						
V	DSC10	Discipline Specific Core Course	UBMS5003	Complex Analysis I	5	4	3	25	75	100
	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
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBMSDE51	1) C++ Practical	5	4	3	25	75	100
			UBMSDE52	2) Astronomy						
			UBMSDE53	3) Number Theory						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBMSSE51	1) Mathematics for Service Commission Examinations	2	1	3	25	75	100
			UBMSSE52	2) Mathematical Modeling						
			UBMSSE53	3) Web Designing						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	DSC13	Discipline Specific Core Course	UBMS6001	Linear Algebra	5	4	3	25	75	100
	DSC14	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
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBMSDE61	1. Graph Theory	5	3	3	25	75	100
			UBMSDE62	2. Fuzzy Mathematics						
			UBMSDE63	3. Actuarial Mathematics						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBMSSP61	1. Mathematical documentations	2	1	3	25	75	100
			UBMSSE62	2. R - Programming						
			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$^\alpha$ 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$^\alpha$ 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) FOR MATHEMATICS PROGRAMME
BY THE END OF THE PROGRAM, THE STUDENTS WILL BE ABLE TO

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

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific Outcomes	Programme Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✔	✔	✔	✔			✔	✔		✔
PSO2	✔	✔	✔	✔			✔	✔	✔	
PSO3	✔		✔	✔	✔		✔	✔		
PSO4	✔	✔		✔	✔			✔	✔	
PSO5	✔		✔	✔		✔	✔	✔	✔	
PSO6		✔	✔	✔	✔		✔	✔	✔	
PSO7		✔	✔	✔				✔	✔	✔
PSO8		✔	✔			✔	✔	✔	✔	✔
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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBPY1001	Properties of Matter and Acoustics	3	3	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB103	Professional Communication for Physical Sciences**	3	3	3	25	75	100
		Discipline Specific Core Practical		Practical - Physics Practical I	3	-	-	-	-	-
	OEC1	Other Elective Course	UBPYAL11	Allied Chemistry I	5	5	3	25	75	100
				Allied Chemistry Practical	3	-	-	-	-	-
	VBC1	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBPY2001	Thermal Physics	6	6	3	25	75	100
	DSC3	Discipline Specific Core Course	UBPYPR21	Practical -Physics Practical I	3	3	3	25	75	100
	OEC2	Other Elective Course	UBPYAL21	Allied Chemistry II	5	5	3	25	75	100
	OEC3	Other Elective Course	UBPYAP21	Allied Chemistry Practical	3	3	3	25	75	100
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education – Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**28**	**-**	**175**	**525**	**725**

Sem										
	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
III			UBHDNM31	Basic Hindi I						
			UBTANM31	Ithazhiyal I						
	DSC4	Discipline Specific Core Course	UBPY3001	Classical Mechanics	6	4	3	25	75	100
	DSC5	Discipline Specific Core Course	UBPYPR31	Practical – 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 Practical – Mathematics I	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education - Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM41	Basic Urdu II	2	1	3	25	75	100
			UBARNM41	Basic Arabic II						
IV			UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	DSC6	Discipline Specific Core Course	UBPY4001	Optics	6	5	3	25	75	100
	DSC7	Discipline Specific Core Practical	UBPYPR41	Practical – 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
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**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
	DSC10	Discipline Specific Core Course	UBPY5003	Applied Electronics	5	4	3	25	75	100

V	DSC11	Discipline Specific Core Course	UBPYPR51	Practical – Physics Practical IV	4	4	3	25	75	100
	DSC12	Discipline Specific Core Course	UBPYPR52	Practical – Electronics Experiments I	4	4	3	25	75	100
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBPYDE51	1. Digital Electronics	5	4	3	25	75	100
			UBPYDE52	2. Power Electronics						
			UBPYDE53	3. Materials Science						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBPYSE51	1. Radiation Physics	2	1	3	25	75	100
			UBPYSE52	2. Electrical Circuit Network Skills						
			UBPYSE53	3. Renewable Energy and Energy Harvesting						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBPYDE61	1.Microprocessor 8085 and 8086	5	3	3	25	75	100
			UBPYDE62	2.Microcontroller and its Applications						
			UBPYDE63	3. Solid State Physics						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBPYSE61	1. Astrophysics	2	1	3	25	75	100
			UBPYSE62	2. Digital Television Maintenance & Troubleshooting						
			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$^{\alpha}$ 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$^{\alpha}$ 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 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 the 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 real life situation.
PSO5: Students will develop the proficiency in the acquisition of data using a variety of laboratory instruments and analyse, interpret of using relevant software and computers.
PSO6: By performing experiments in the laboratories and interpret 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 continuous learning through MOOC, ODL and various learning platforms.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	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										
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBCH1001	General Chemistry I	3	3	3	25	75	100
	SEC1	Skill Enhancement Course	UBSKB103	Professional Communication English for Physical Sciences**	3	3	3	25	75	100
		Discipline Specific Core Practical		Semimicro Analysis of Simple Salt and Complex Preparation	3	-	-	-	-	-
	OEC1	Other Elective Course	UBCHAL11	Allied Physics I	5	5	3	25	75	100
		Other Elective Course		Allied Physics Practical	3	-	-	-	-	-
	VBC1	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	UBCH2001	General Chemistry II	6	6	3	25	75	100
	DSC3	Discipline Specific Core Course	UBCHPR21	Semimicro Analysis of Inorganic Mixture and Complex Preparation	3	3	3	25	75	100
	OEC2	Other Elective Course	UBCHAL21	Allied Physics II	5	5	3	25	75	100
	OEC3	Other Elective Course	UBCHAP21	Allied Physics Practical	3	3	3	25	75	100
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**28**	**-**	**175**	**525**	**725**

Sem										
III	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
			UBHDNM31	Basic Hindi I						
			UBTANM31	Ithazhiyal I						
	DSC4	Discipline Specific Core Course	UBCH3001	General Chemistry III	6	4	3	25	75	100
	DSC5	Discipline Specific Core Course	UBCHPR31	Volumetric Estimation I	3	3	3	25	75	100
	OEC5	Other Elective Course **(To choose 1 out of 2)**	UBCHAL31	Allied – Mathematics I	5	4	3	25	75	100
			UBCHAL32	Allied – Zoology I						
	OEC6	Other Elective Course **(To choose 1 out of 2)**	UBCHAP31	Allied Practical – Mathematics I	3	3	3	25	75	100
			UBCHAP32	Allied Practical – Zoology I						
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education – Sports II[#]						
				TOTAL	30	25	-	175	525	725
IV	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM41	Basic Urdu II	2	1	3	25	75	100
			UBARNM41	Basic Arabic II						
			UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	DSC6	Discipline Specific Core Course	UBCH4001	General Chemistry IV	6	5	3	25	75	100
	DSC7	Discipline Specific Core Practical	UBCHPR41	Volumetric Estimation II	3	3	3	25	75	100
	OEC8	Other Elective Course	UBCHAL41	Allied – Mathematics II	5	3	3	25	75	100
			UBCHAL42	Allied –Zoology II						
	OEC9	Other Elective Course	UBCHAP41	Allied Mathematics Practical II	3	3	3	25	75	100
			UBCHAP42	Allied Practical – Zoology II						
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	30	25	-	175	525	725
	DSC8	Discipline Specific Core Course	UBCH5001	Inorganic Chemistry I	5	4	3	25	75	100
	DSC9	Discipline Specific Core Course	UBCH5002	Organic Chemistry I	5	4	3	25	75	100

Sem										
V	DSC10	Discipline Specific Core Course	UBCH5003	Physical Chemistry I	5	4	3	25	75	100
	DSC11	Discipline Specific Core Course	UBCHPR51	Gravimetric Estimation I	4	4	3	25	75	100
	DSC12	Discipline Specific Core Course	UBCHPR52	Physical Chemistry Practical I	4	4	3	25	75	100
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCHDE51	1.Applied Chemistry I	5	4	3	25	75	100
			UBCHDE52	2.Industrial Chemistry I						
			UBCHDE53	3. Essential Skill in Chemistry I						
	SEE1	Skill Enhancement Elective Practical Course **(To choose 1 out of 3)**	UBCHSP51	1. Organic Chemistry Practical I	2	1	3	25	75	100
			UBCHSP52	2. Analysis of Organic Compounds						
			UBCHSE53	3. Skill Development in Chemistry Practical I						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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	4	4	3	25	75	100
	DSC17	Discipline Specific Core Course	UBCHPR62	Physical Chemistry Practical II	4	4	3	25	75	100
	DSE2	Discipline-Specific Elective Course (To choose 1 out of 3)	UBCHDEP6	1. Applied Chemistry II	5	3	3	25	75	100
			UBCHDE62	2. Industrial Chemistry II						
			UBCHDE63	3. Essential Skill in Chemistry II						
	SEE2	Skill Enhancement Elective Practical Course (To choose 1 out of 3)	UBCHSP61	1. Organic Chemistry Practical II	2	1	3	25	75	100
			UBCHSP62	2. Preparation of Organic Compounds						
			UBCHSE63	3. 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[α] 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[α] 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 onecredit 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 concept learnt from theory and practical work.
PSO2	Apply principles, theories and technique of the core subjects to other 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 over industrial process development and their applications.
PSO5	Pursue his higher education in various inter disciplinary subjects connected with technology and research.
PSO6	Handle chemicals, apparatus and instruments by 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 Specific Outcomes (PSOs)	Program Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO3	✓	✓	✓	✓	✓	✓	✓	✓		✓
PSO4	✓	✓	✓	✓	✓	✓	✓	✓		
PSO5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO6	✓	✓	✓	✓	✓	✓	✓	✓		
PSO7	✓	✓	✓	✓	✓	✓	✓	✓		✓
PSO8	✓	✓	✓	✓	✓	✓	✓	✓		✓
Number of matches = 73, 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 B.Sc. BIOCHEMISTRY

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	UBBI1001	Cytology processes and	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		Quantitative and Qualitative Analysis	3	-	-	-	-	-
	OEC1	Other Elective Course	UBBIAL11	Allied Chemistry I	5	5	3	25	75	100
		Other Elective Course		Allied Chemistry Practical	3	-	-	-	-	-
	VBC1	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			UBFHD201	Hindi II						
			UBFTA201	Tamil II						
	GE4	Generic Elective	UBFEN201	English II	4	4	3	25	75	100
	AEC2	Ability Enhancement Course	UBBIV201	Environmental Studies *	2	1	3	25	75	100
	DSC2	Discipline Specific Core Course	UBBI2001	Biomolecules	6	6	3	25	75	100
	DSC3	Discipline Specific Core Course	UBBIPR21	Quantitative and Qualitative Analysis	3	3	3	25	75	100
	OEC2	Other Elective Course	UBBIAL21	Allied Chemistry-II	5	5	3	25	75	100
	OEC3	Other Elective Course	UBBIAP21	Allied Chemistry Practical	3	3	3	25	75	100
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**28**	**-**	**175**	**525**	**725**

III	GE5	Generic Elective (To choose 1 out of 4)	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course (To choose 1 out of 4)	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
			UBHDNM31	Basic Hindi I						
			UBTANM31	Ithazhiyal I						
	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	3	3	3	25	75	100
	OEC5	Other Elective Course	UBBIAL31	Allied Zoology I	5	4	3	25	75	100
	OEC6	Other Elective Course	UBBIAP31	Allied Zoology Practical I	3	3	3	25	75	100
	VBC3	Value-Based Course (To choose 1 out of 2)	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education - Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	GE7	Generic Elective (To choose 1 out of 4)	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
	OEC7	Other Elective Course (To choose 1 out of 4)	UBURNM41	Basic Urdu II	2	1	3	25	75	100
			UBARNM41	Basic Arabic II						
			UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	DSC6	Discipline Specific Core Course	UBBI4001	Analytical Biochemistry and Bioinformatics	6	5	3	25	75	100
	DSC7	Discipline Specific Core Practical	UBBIPR41	Colorimetric Analysis and Preparation of Buffers	3	3	3	25	75	100
	OEC8	Other Elective Course	UBBIAL41	Allied Zoology II	5	3	3	25	75	100
	OEC9	Other Elective Course	UBBIAP41	Allied Zoology Practical II	3	3	3	25	75	100
	VBC4	Value-Based Course (To choose 1 out of 2)	UBVBC401	1. Cyber Security[#]	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**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

V	**DSC10**	Discipline Specific Core Course	UBBI5003	Human Anatomy and Physiology	5	4	3	25	75	100
	DSC11	Discipline Specific Core Course	UBBIPR51	Colorimetric Analysis and Electrophoresis	4	4	3	25	75	100
	DSC12	Discipline Specific Core Course	UBBIPR52	Medical Laboratory Technology Practical I	4	4	3	25	75	100
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBBIDE51	1. Medical Laboratory Technology	5	4	3	25	75	100
			UBBIDE52	2. Microbiology						
			UBBIDE52	3. Stem Cell Biology						
	SEC2	Skill Enhancement Course **(To choose 1 out of 3)**	UBBISE51	1. Biotechnology I	2	1	3	25	75	100
			UBBISE52	2. Plant Tissue Culture						
			UBBISE53	3. Bioinformatics						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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	4	4	3	25	75	100
	DSC17	Discipline Specific Core Course	UBBIPR62	Medical Laboratory Technology Practical II	4	4	3	25	75	100
	DSE2	Discipline-Specific Elective (To choose 1 out of 3)	UBBIDE61	1. Nutritional Biochemistry and Dietetics	5	3	3	25	75	100
			UBBIDE62	2. Plant Biochemistry						
			UBBIDE63	3. Endocrinology						
	SEC3	Skill Enhancement Course (To choose 1 out of 3)	UBBISE61	1. Biotechnology II	2	1	3	25	75	100
			UBBISE62	2. Animal Cell Culture						
			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 40α hrs	-	-	-	25	75	100
	VBC6	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 40α 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
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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. 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- Unsderstand the fundamental biochemical principles such as structure- function relationship of biomolecules/metabolic pathways with their clinical correlation.

PSO3- Demostrate and understanding of the principle and have the 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's and ICT tools.

PSO5- Explain the biochemical process that underline relationship between phenotype and genotype, structural organization of genetic material, their experience and control.

PSO6- Acquire life long self learning habits through online courses, ability to plan and manage projects in order to achieve the objectives.

PSO7- Develop ethical and moral values in 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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				COURSE STRUCTURE FOR B.Sc BIOTECHNOLOGY						
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	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 & 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 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**625**
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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
	DSC3	Discipline Specific Core Course	UBBTPR21	Practical - Cell & Molecular Biologyand 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 Practical - Fundamentals of Botany and Ethnobotany	3	3	3	25	75	100
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	**30**	**28**	**-**	**175**	**525**	**725**

III	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM31	Basic Arabic I						
			UBHDNM31	Basic Hindi I						
			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 Practical - Plant Tissue Culture	3	3	3	25	75	100
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education - Sports II[#]						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE8	Generic Elective	UBFEN401	English IV	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM41	Basic Urdu II	2	1	3	25	75	100
			UBARNM41	Basic Arabic II						
			UBHDNM41	Basic Hindi II						
			UBTANM41	Ithazhiyal II						
	DSC6	Discipline Specific Core Course	UBBT4001	Biochemistry and Biophysics	6	5	3	25	75	100
	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 Practical - Plant Biotechnology	3	3	3	25	75	100
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
V	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	Practical – Genetic Engineering and Medical Biotechnology	4	4	3	25	75	100
	DSC12	Discipline Specific Core Course	UBBTPR52	Practical - Microbial Biotechnology	4	4	3	25	75	100

	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBBTDE51	Medical Lab Technology	5	4	3	25	75	100
			UBBTDE52	2. Fermentation Technology						
			UBBTDE53	3. Endocrinology						
	SEC2	Skill Enhancement Course **(To choose 1 out of 3)**	UBBTSE51	1. Herbal Products	2	1	3	25	75	100
			UBBTSE52	2. Biofertilizers						
			UBBTSE53	3. Vermiculture						
	INT1	Apprenticeship / Internship and Report 30 hrs per Semester			-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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	Practical – Environmental and Aquaculture Biotechnology	4	4	3	25	75	100
	DSC17	Discipline Specific Core Course	UBBTPR62	Practical - Animal Biotechnology	4	4	3	25	75	100
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBBTDE61	1.Basic Nano Science & Technology	5	3	3	25	75	100
			UBBTDE62	2.Bioinstumentation						
			UBBTDE63	3. Biostatistics and Bioinformatics						
	SEC3	Skill Enhancement Course **(To choose 1 out of 3)**	UBBTSE61	1. Tannery Effluent Treatment	2	1	3	25	75	100
			UBBTSE62	2. Spirullina Cultivation						
			UBBTSE63	3. Hydroponics Techniques						
	INT1	Internship	UBBTPJ61	Apprenticeship / Internship & Report 30+30+30= 90[##]	-	30	3	25	75	100
	VBC5	Value-Based Course	UBEXAC61	Extension Activities 40$^{\alpha}$hrs	-	-	-	25	75	100
	VBC6	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$^{\alpha}$ 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 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 solution to solve issues of 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 higher career in industry, medical 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 the cross cutting issues in a global, economic, environmental, and societal context.

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

Programme Specific Outcomes (PSOs)	Programme Outcomes (PO)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	√	√	√	√			√			
PSO2	√	√	√		√	√	√	√		
PSO3	√	√	√	√	√	√		√	√	√
PSO4	√		√		√	√			√	
PSO5	√	√				√			√	
PSO6	√	√	√	√	√	√	√	√	√	√
PSO7		√	√	√						√
PSO8	√	√		√	√		√	√		√
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 | | | | | | | |

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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
	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 **(To choose 1 out of 2)**	UBCCAL11	Allied - Mathematical Foundation I	5	5	3	25	75	100
			UBCCAL12	Allied - Computer Oriented Statistical Methods I						
		Other Elective Course		Allied - Mathematical Foundation - Lab	3	-	-	-	-	-
				Allied - Computer Oriented Statistical Methods - Lab						
	VBC1	Value-Based Course **(To choose 1 out of 2)**	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	30	22	-	150	450	625
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	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 **(To choose 1 out of 2)**	UBCCAL21	Allied - Mathematical Foundation II	4	5	3	25	75	100
			UBCCAL21	Allied - Computer Oriented Statistical Methods II						
	OEC3	Other Elective Course Course **(To choose 1 out of 2)**	UBCCAP21	Allied - Mathematical Foundation - Lab	4	3	3	25	75	100
			UBCCAP22	Allied - Computer Oriented Statistical Methods - Lab						
	VBC2	Value-Based Course **(To choose 1 out of 2)**	UBVBC201	1. Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	30	28	-	175	525	725

III	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM32	Basic Arabic I						
			UBHDNM33	Basic Hindi I						
			UBTANM33	Ithazhiyal I						
	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
	OEC5	Other Elective Course **(To choose 1 out of 2)**	UBCCAL31	Computer Oriented Accounts I	5	4	3	25	75	100
			UBCCAL32	Discrete Mathematics I						
	OEC6	Other Elective Course **(To choose 1 out of 2)**	UBCCAP31	Computer Oriented Accounts - Lab I	3	3	3	25	75	100
			UBCCAP32	Discrete Mathematics I - Lab						
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC[#]	1	1	1	**(online exam)**		25
			UBVBC302	2. Physical Education – Sports II[#]						
				TOTAL	30	25	-	175	525	725
IV	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu II	2	1	3	25	75	100
			UBARNM32	Basic Arabic II						
			UBHDNM33	Basic Hindi II						
			UBTANM33	Ithazhiyal II						
	DSC7	Discipline Specific Core Course	UBCC4001	Programming in Java	5	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 1 out of 2)**	UBCCAL41	Allied - Computer Oriented Accounts II	6	4	3	25	75	100
			UBCCAL42	Discrete Mathematics II						
	OEC9	Other Elective Course **(To choose 1 out of 2)**	UBCCAP41	Allied - Computer Oriented Accounts Lab II	3	3	3	25	75	100
			UBCCAP42	Discrete Mathematics II – Lab						
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security[#]	1	1	1	**(online exam)**		25
			UBVBC402	2. Entrepreneurship[#]						
	INT1	Apprenticeship / Internship and Report 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

V	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
	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
V	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCCDE51	1. Programming in R	5	4	3	25	75	100
			UBCCDE52	2. Deep Learning						
			UBCCDE53	3. Digital Image Processing						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCCSE51	1. Programming in R Lab	2	1	3	25	75	100
			UBCCSE52	2. Deep Learning Lab						
			UBCCSE53	3. Cloud Computing						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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	4	3		25	75	100
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCCDE61	1. Big Data and Analytics	4	2	3	25	75	100
			UBCCDE62	2. Open Source Programming						
			UBCCDE63	3. Business Inteligence and Analytics						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCCSE61	1. Big Data and Analytics Lab	2	1	3	25	75	100
			UBCCSE62	2. Open Source Programming Lab						
			UBCCSE63	3. Business Inteligence and Analytics - Lab						
	INT1	Internship	UBCCPJ61	Apprenticeship / Internship & Report 30+30+30= 90[##]	-	30	3	25	75	100
	SEC5	Skill Enhancement Course	UBEXAC61	Extension Activities 40$^{\alpha}$ 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$^{\alpha}$ 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 (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: Identify, formulate and analyze complex real-life problems in terms of mathematical modeling 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 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 in an ethical way, keeping in the 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 technical community
PSO 9	Individual and Team work: Ability to work in hierarchical team both as a member and leader.
PSO 10	Innovation and entrepreneurship: Ability to apply innovative ideas to become a entrepreneur.

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

Programme Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO2	✓	✓	✓	✓						
PSO3		✓	✓	✓			✓	✓		
PSO4	✓	✓		✓	✓		✓			
PSO5		✓	✓	✓	✓	✓	✓			✓
PSO6	✓		✓	✓	✓		✓			✓
PSO7	✓				✓	✓	✓	✓	✓	✓
PSO8	✓				✓			✓		✓
PSO9	✓	✓	✓	✓	✓	✓			✓	✓
PSO10	✓	✓			✓			✓	✓	✓
Number of matches = 62, 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 B.Sc. DATA SCIENCE						
Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	GE1	Generic Elective **(To choose 1 out of 4)**	UBFUR101	Urdu I	6	5	3	25	75	100
			UBFAR101	Arabic I						
			UBFHD101	Hindi I						
			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	Proplem Solving and Algorithms	3	3	3	25	75	100
	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 **(To choose 1 out of 2)**	UBCCAL11	Allied - Mathematical Foundation I	5	5	3	25	75	100
			UBCCAL12	Allied - Computer Oriented Statistical Methods I						
		Other Elective Course		Allied - Mathematical Foundation - Lab	3	-	-	-	-	-
				Allied - Computer Oriented Statistical Methods - Lab						
	VBC1	Value-Based Course (To choose 1 out of 2)	UBVBC101	1. Moral Education#	1	1	1	(online exam)		25
			UBVBC102	2. Physical Education – Yoga#						
				TOTAL	30	22	-	150	450	625
II	GE3	Generic Elective **(To choose 1 out of 4)**	UBFUR201	Urdu II	6	5	3	25	75	100
			UBFAR201	Arabic II						
			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	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 **(To choose 1 out of 2)**	UBCCAL21	Allied - Mathematical Foundation II	4	5	3	25	75	100
			UBCCAL22	Allied - Computer Oriented Statistical Methods II						
	OEC3	Other Elective Course Course **(To choose 1 out of 2)**	UBCCAP21	Allied - Mathematical Foundation - Lab	4	3	3	25	75	100
			UBCCAP22	Allied - Computer Oriented Statistical Methods - Lab						
	VBC2	Value-Based Course (To choose 1 out of 2)	UBVBC201	1. Physical Education - Sports I#	1	1	1	(online exam)		25
			UBVBC202	2. Health & Wellness#						
				TOTAL	30	28	-	175	525	725

III	GE5	Generic Elective **(To choose 1 out of 4)**	UBFUR301	Urdu III	4	4	3	25	75	100
			UBFAR301	Arabic III						
			UBFHD301	Hindi III						
			UBFTA301	Tamil III						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC4	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu I	2	1	3	25	75	100
			UBARNM32	Basic Arabic I						
			UBHDNM33	Basic Hindi I						
			UBTANM33	Ithazhiyal I						
	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
	OEC5	Other Elective Course **(To choose 1 out of 2)**	UBDSAL31	Allied – Python for Data Science	5	4	3	25	75	100
			UBCCAL32	Discrete Mathematics I						
	OEC6	Other Elective Course **(To choose 1 out of 2)**	UBDSAP31	Allied – Python for Data Science - Lab	3	3	3	25	75	100
			UBCCAP32	Discrete Mathematics I - Lab						
	VBC3	Value-Based Course **(To choose 1 out of 2)**	UBVBC301	1. N.C.C, N.S.S, YRC & RRC#	1	1	1	(online exam)		25
			UBVBC302	2. Physical Education – Sports II#						
				TOTAL	**30**	**25**	**-**	**175**	**525**	**725**
IV	GE7	Generic Elective **(To choose 1 out of 4)**	UBFUR401	Urdu IV	4	4	3	25	75	100
			UBFAR401	Arabic IV						
			UBFHD401	Hindi IV						
			UBFTA401	Tamil IV						
	GE6	Generic Elective	UBFEN301	English III	6	5	3	25	75	100
	OEC7	Other Elective Course **(To choose 1 out of 4)**	UBURNM31	Basic Urdu II	2	1	3	25	75	100
			UBARNM32	Basic Arabic II						
			UBHDNM33	Basic Hindi II						
			UBTANM33	Ithazhiyal II						
	DSC7	Discipline Specific Core Course	UBCC4001	Programming in Java	5	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 1 out of 2)**	UBCCAL41	Allied - Computer Oriented Accounts II	6	4	3	25	75	100
			UBCCAL42	Discrete Mathematics II						
	OEC9	Other Elective Course **(To choose 1 out of 2)**	UBCCAP41	Allied - Computer Oriented Accounts Lab II	3	3	3	25	75	100
			UBCCAP42	Discrete Mathematics II - Lab						
	VBC4	Value-Based Course **(To choose 1 out of 2)**	UBVBC401	1. Cyber Security#	1	1	1	(online exam)		25
			UBVBC402	2. Entrepreneurship#						
	INT1	Apprenticeship / Internship and Report 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	UBDS5002	Data Visuvalization Techniques	6	5	3	25	75	100
	DSC12	Discipline Specific Core Course	UBDS5003	Data Warehousing and Data Mining	5	4	3	25	75	100

Sem	Code	Course Type	Course Code	Title						
V	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 Visuvalization Techniques - Lab	3	3	6	25	75	100
	DSE1	Discipline-Specific Elective **(To choose 1 out of 3)**	UBDSDE51	1. R for Data Science	5	4	3	25	75	100
			UBCCDE52	2. Deep Learning						
			UBCCDE53	3 Digital Image Processing						
	SEE1	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBDSSE51	1. R for Data Science Lab	2	1	3	25	75	100
			UBCCSE52	2. Deep Learning Lab						
			UBCCSE53	3. Cloud Computing						
	INT1			Apprenticeship / Internship and Report 30 hrs per Semester	-	-	-	-	-	-
				TOTAL	**30**	**25**	**-**	**175**	**525**	**700**
VI	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
	DSE2	Discipline-Specific Elective **(To choose 1 out of 3)**	UBCCDE61	1. Big Data and Analytics	4	2	3	25	75	100
			UBDSDE62	2. Predictive Modeling and Analytics						
			UBCCDE63	3. Business Inteligence and Analytics						
	SEE2	Skill Enhancement Elective Course **(To choose 1 out of 3)**	UBCCSE61	1. Big Data and Analytics Lab	2	1	3	25	75	100
			UBDSSE62	2. Predictive Modeling and Analytics Lab						
			UBCCSE63	3. Business Inteligence 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$^\alpha$ 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$^\alpha$ 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 in par with the expected quality standards.
PSO2	Apply analytical and critical thinking to identify, formulate, analyze, and solve complex problems in order to reach authenticated conclusions
PSO3	Design and develop solutions for complex problems with specified needs through appropriate consideration 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 socially responsible individual with ethical values and accountable to ethically validate any actions or decisions before proceeding and actively contribute to the societal concerns.
PSO9	Identify and address own educational needs in a changing world in ways sufficient to Maintain the 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 and in multidisciplinary environment.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓			✓	✓	✓			
PSO2	✓		✓	✓	✓		✓			
PSO3	✓	✓	✓	✓			✓			
PSO4	✓	✓	✓	✓			✓	✓		
PSO5	✓				✓	✓	✓	✓	✓	
PSO6	✓	✓	✓	✓	✓		✓	✓		✓
PSO7	✓			✓	✓	✓	✓	✓	✓	
PSO8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSO9	✓				✓			✓	✓	
PSO10	✓				✓	✓	✓	✓		✓
Number of matches = 61, 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

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. History
Any three-year undergraduate degree holder is eligible

For M.Sc. Mathematics
UG degree in Mathematics/Statistics

For M.Sc. Biochemistry
UG degree in Chemistry / Biochemistry / Zoology / Biotechnology are eligible

For M.Sc. Biotechnology
UG degree in Zoology / Biochemistry / Chemistry / Botany / Biotechnology / Microbiology are eligible

For M.Sc. Computer Science
UG degree in Computer Science / Software Computer Science / Computer Applications 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.

For M.A. English Lit.
Any three-year UG Course with the English language in four semesters is 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 rules in force.

3. ELIGIBILITY FOR THE AWARD OF 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.

a) Each academic year shall be divided into two semesters. The first academic year shall comprise the first and second semesters, 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 and Human Rights.

6. PROJECT WORK

It is considered as 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 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 college offering the respective postgraduate program.

7. CONTINUOUS INTERNAL ASSESSMENT [CIA] TEST

The following assessment procedure will be followed for Internal Marks:

CIA Test I   : Two hours duration for 75 marks
CIA Test II   : Three hours duration for 75 marks

Marks Distribution	Theory & Practical
CIA Test Marks 150 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 - 75	Test II - 75	Total - 150	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 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

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 in the P.G. Courses.

II. Candidates shall be permitted to proceed from the First Semester upto 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 atleast 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 of 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 the 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 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 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	O	10
86 – 95	A+	9
76 – 85	A	8
66 – 75	B+	7
55 – 65	B	6
50 – 54	C	5
00 – 49	F	0
Absent	Ab	0

ILLUSTRATION OF SGPA

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

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

$$\textbf{SGPA I} = \frac{169}{22} = 7.7$$

$$\textbf{SGPA II} = \frac{168}{22} = 7.6$$

$$\textbf{SGPA III} = \frac{163}{22} = 7.4$$

$$\textbf{SGPA IV} = \frac{194}{24} = 8.1$$

The CGPA for the PG degree is:

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

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 CGPA 7.5 and above without any arrear : **First Class with Distinction**

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

Passed all the courses with CGPA 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.

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

$$\text{CGPA} = \frac{\sum_n \sum_i C_{ni} G_{ni}}{\sum_n \sum_i C_{ni}}$$

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

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 semester shall appear for such papers in the next End Semester 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 certifies 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 for 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 is mandatory and the certificate of completion of MOOC is to be enclosed along with the dissertation at the time of its submission

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 Holder. 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 2020-21 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 COURSES

Section A	To answer ALL the 5 questions (either or type) (One question from each UNIT)	5 x 6 = 30 Marks
Section B	To answer 3 questions (out of 5 questions) (One question from each UNIT)	3 x15 =45 Marks
TOTAL		75 Marks

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 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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				COURSE STRUCTURE FOR M.A. ENGLISH						
I	DSC1	Discipline Specific Core Course	PBEN1001	British Literature I	6	5	3	25	75	100
	DSC2	Discipline Specific Core Course	PBEN1002	Indian Literature in English	6	5	3	25	75	100
	DSC3	Discipline Specific Core Course	PBEN1003	American Literature	6	4	3	25	75	100
	DSC4	Discipline Specific Core Course	PBEN1004	Women's Writing in English	6	4	3	25	75	100
	DSEI	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBENDE11	1. Critical Interpretation of R.K. Narayan	6	4	3	25	75	100
			PBENDE12	2.Indian English Poetry						
			PBENDE13	3.Modern English Literature						
				TOTAL	**30**	**22**	**-**	**125**	**375**	**500**
II	DSC5	Discipline Specific Core Course	PBEN2001	British Literature II	5	5	3	25	75	100
	DSC6	Discipline Specific Core Course	PBEN2002	English Language and Linguistics	6	5	3	25	75	100
	DSC7	Discipline Specific Core Course	PBEN2003	New Literature in English	6	4	3	25	75	100
	DSC8	Discipline Specific Core Course	PBEN2004	Post-Colonial Literature	5	4	3	25	75	100
	VBCI	Value Based Course	PBHR2001	Human Rights	2	-	3	25	75	100
	DSE2	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBENDE21	1. New Trends of Contemporary Literature	6	4	3	25	75	100
			PBENDE22	2. Post Modernism						
			PBENDE23	3. Critical Interpretation of English Poetry						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
III	DSC9	Discipline Specific Core Course	PBEN3001	Modern and Postmodern Literature	6	4	3	25	75	100
	DSC10	Discipline Specific Core Course	PBEN3002	Literary Theory and Criticism I	6	4	3	25	75	100
	DSC11	Discipline Specific Core Course	PBEN3003	English Language Teaching	5	4	3	25	75	100
	DSC12	Discipline Specific Core Course	PBEN3004	Subaltern Literature	5	4	3	25	75	100
	VBC2	Value Based Course	PBENVB31	Research Methodology & Ethics	3	3	3	25	75	100
	DSE3	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBENDE31	1. Interpretation of Literature	5	3	3	25	75	100
			PBENDE32	2. South Asian Literatuer in Translation						
			PBENDE33	3. Aesthetics in English Literature						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
IV	DSC13	Discipline Specific Core Course	PBEN4001	Literary Theory and Criticism II	6	5	3	25	75	100
	DSC14	Discipline Specific Core Course	PBEN4002	Shakespeare	6	4	3	25	75	100
	DSC15	Discipline Specific Core Course	PBEN4003	Special Author	5	4	3	25	75	100

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
DSE4	Discipline Specific Elective Course **(To choose 1 out of 2)**	PBENDE41	1. Success with Language	5	4	3	25	75	100
		PBENDE42	2. Technical Writing						
		PBENDE43	3. Principles of Public Speaking						
	VBC2	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@	-	1	-	-	-	-
			TOTAL	30	24	-	150	450	600
			GRAND TOTAL	**120**	**90**	**-**	**575**	**1725**	**2300**

PROGRAMME SPECIFIC OUTCOMES

PSO1	Illustrate the connection between the modern themes and classical and romantic ideas
PSO2	Explains the methodical approach to the literature and to categorize.
PSO3	Compare the language scientific and non-scientific way of doing things.
PSO4	Discovers the visual arts which is vexed and complex history.
PSO5	Connects the language as study of reasoning and 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, logical and empirical investigations.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				COURSE STRUCTURE FOR M.A. HISTORY						
I	DSC1	Discipline Specific Core Course	PBHI1001	Social and Cultural History of India up toCE 1206	6	5	3	25	75	100
	DSC2	Discipline Specific Core Course	PBHI1002	Social and Cultural History of Tamil Nadu up to CE 1565	6	5	3	25	75	100
	DSC3	Discipline Specific Core Course	PBHI1003	History of Ancient Civilizations	6	4	3	25	75	100
	DSC4	Discipline Specific Core Course	PBHI1004	Islamic History from CE 500 to 750	6	4	3	25	75	100
	DSEI	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBHIDE11	1.Travel Management	6	4	3	25	75	100
			PBHIDE12	2.Principles of Archaeology						
			PBHIDE13	3.History of Peasant and Labour Movement in Modern India						
				TOTAL	**30**	**22**	**-**	**125**	**375**	**500**
II	DSC5	Discipline Specific Core Course	PBHI2001	Social and Cultural History of India from CE 1206 to 1857	5	5	3	25	75	100
	DSC6	Discipline Specific Core Course	PBHI2002	Social and Cultural History of Tamil Nadu from CE 1565 to 2000	6	5	3	25	75	100
	DSC7	Discipline Specific Core Course	PBHI2003	History of Medieval Civilizations	6	4	3	25	75	100
	DSC8	Discipline Specific Core Course	PBHI2004	Islamic History from CE 750 to 1258	5	4	3	25	75	100
	VBCI	Value Based Course	PBHR2001	Human Rights	2	-	3	25	75	100
	DSE2	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBHIDE21	1. Hotel Management	6	4	3	25	75	100
			PBHIDE22	2. Introduction to Epigraphy And Numismatics In India						
			PBHIDE23	3. Makers of Modern India I						
				TOTAL	30	22	-	150	450	600
III	DSC9	Discipline Specific Core Course	PBHI3001	Social and Cultural History of India from CE 1857 to 2010	6	4	3	25	75	100
	DSC10	Discipline Specific Core Course	PBHI3002	History of Modern Civilizations	6	4	3	25	75	100
	DSC11	Discipline Specific Core Course	PBHI3003	Historiography	5	4	3	25	75	100
	DSC12	Discipline Specific Core Course	PBHI3004	History of the Ottoman Empire	5	4	3	25	75	100
	VBC2	Value Based Course	PBHIVB31	Research Methodology & Ethics	3	3	3	25	75	100

Sem	Category	Course Type	Course Code	Title						
	DSE3	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBHIDE31	1. Economic History of Medieval India	5	3	3	25	75	100
			PBHIDE32	2. Principles of Museology						
			PBHIDE33	3. Makers of Modern India II						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
IV	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
	OEC1	Other Elective Course	PBHINM41	Introduction to Journalism	3	2	3	25	75	100
	DSE4	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBHIDE41	1. Economic History of Modern India	5	4	3	25	75	100
			PBHIDE42	2. Introduction to Sociology						
			PBHIDE43	3. Indian Geography						
	VBC2	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@		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

Programme Specific Outcomes (PSO'S) of the PG Programme in History
After the completion of 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, 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 ability to identify research questions, select appropriate method for analysis to resolve and effective Presentation of conclusions.
PSO 5	Develop the skills to compete for a career in the field of Historical studies as teacher, researcher, other associated professions and also in the allied disciplines like 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 view points in an effective manner.
PSO 7	Relate the knowledge of allied disciplines in proper understanding of History and engage in life-long learning of allied disciplines.
PSO 8	Appraise the diversities in the world arising out of a diverse condition and apply the knowledge to contribute for a better world.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Programme Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	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 the living standards and towards building a Sustainable Environment

PO8 Discover a passion for Lifelong Learning through MOOCs, ODL, and Self-Learning techniques through 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.						

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
I	DSC1	Discipline Specific Core Course	PBCO1001	Marketing Management	6	5	3	25	75	100
	DSC2	Discipline Specific Core Course	PBCO1002	Advanced Management Accounting	6	5	3	25	75	100
	DSC3	Discipline Specific Core Course	PBCO1003	Advanced Business Statistics	6	4	3	25	75	100
	DSC4	Discipline Specific Core Course	PBCO1004	Global Financial System	6	4	3	25	75	100
	DSEI	Discipline Specific Elective Course (To choose 1 out of 3)	PBCODE11	1. Strategic Management	6	4	3	25	75	100
			PBCODE12	2. Corporate Management						
			PBCODE13	3. Corporate Laws						
				TOTAL	**30**	**22**	**-**	**125**	**375**	**500**
II	DSC5	Discipline Specific Core Course	PBCO2001	Strategic Human Resource Management	5	5	3	25	75	100
	DSC6	Discipline Specific Core Course	PBCO2002	Advanced Financial Management	6	5	3	25	75	100
	DSC7	Discipline Specific Core Course	PBCO2003	Resource Management Techniques	6	4	3	25	75	100
	DSC8	Discipline Specific Core Course	PBCO2004	Business Environment	5	4	3	25	75	100
	VBCI	Value Based Course	PBHR2001	Human Rights	2	-	3	25	75	100
	DSE2	Discipline Specific Elective Course (To choose 1 out of 3)	PBCODE21	1. International Business	6	4	3	25	75	100
			PBCODE22	2. EXIM Management						
			PBCODE23	3. Supply Chain Management						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
III	DSC9	Discipline Specific Core Course	PBCO3001	Advanced Accounting	6	4	3	25	75	100
	DSC10	Discipline Specific Core Course	PBCO3002	Indirect Taxes	6	4	3	25	75	100
	DSC11	Discipline Specific Core Course	PBCO3003	Security Analysis & Portfolio Management	5	4	3	25	75	100
	DSC12	Discipline Specific Core Course	PBCO3004	Business Analytics	5	4	3	25	75	100
	VBC1	Value Based Course	PBRME301	Research Methodology & Ethics	3	3	3	25	75	100
	DSE3	Discipline Specific Elective Course (To choose 1 out of 3)	PBCODE31	1. Consumer Behaviour	5	3	3	25	75	100
			PBCODE32	2. Performance & Compensation Management						
			PBCODE33	3. Corporate Finance						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
IV	DSC13	Discipline Specific Core Course	PBCO4001	Advanced Cost Accounting	6	5	3	25	75	100
	DSC14	Discipline Specific Core Course	PBCO4002	Direct Taxes	6	4	3	25	75	100
	DSC15	Discipline Specific Core Course	PBCO4003	Entrepreneurial Development & New Venture Creation	5	4	3	25	75	100
	DSC16	Discipline Specific Core Course	PBCO4004	Business Ethics & Corporate Governance	5	4	3	25	75	100
	OEC1	Other Elective Course	PBCONM41	Data Analyses using SPSS	3	2	3	25	75	100

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

@   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 for the purpose of evaluating business/organization/corporate firms & their operations, analyze and assist in Business Decision Making for increasing profitability, decreasing costs, selection from various alternatives and Reporting the statements.

PSO2 Develop Entrepreneurial intent, skills, abilities and make students capable of professionally Communicating, Organising & Managing Business operations, especially the strategic management of Accounting & Finances, Human Resources, Marketing and carryout 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 a Business Research to identify problems and communicate the results to suggest solutions

PSO4 Understand various Acts & legal provisions with regard to/governing operation of Business, 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 behavior of individuals in a workplace, research and enact policies to increase productivity of the organization. Develop and hone necessary Entrepreneurship

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

PSO7 Understand the theories and concepts in International business, International Business & Financial Environment, 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 Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	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

PROGRAMME OUTCOMES FOR M.Sc. PROGRAMMES

PO11   Demonstrate knowledge and scientific understanding to identity 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)									
Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
SEMESTER I									
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
DSC4	Discipline Specific Core Course	PBMS1004	Classical Dynamics	6	4	3	25	75	100
DSEI	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBMSDE11	Operations Research I	6	4	3	25	75	100
		PBMSDE12	Advanced Graph Theory						
		PBMSDE13	Algebraic Number Theory						
			TOTAL	30	22	-	125	375	500
SEMESTER II									
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
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
DSE2	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBMSDE21	Operations Research II	6	4	3	25	75	100
		PBMSDE22	Tensor Analysis						
		PBMSDE23	Stochastic Processes						
			TOTAL	30	22	-	150	450	600
SEMESTER III									
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
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
DSE3	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBMSDE31	Calculus of Variations	5	3	3	25	75	100
		PBMSDE32	Acturial Mathematics						
		PBMSDE33	Discrete Mathematics						
			TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
			SEMESTER IV						
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	Mathematical Statistics	5	4	3	25	75	100
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
DSE4	Discipline Specific Elective Course (To choose 1 out of 3)	PBMSDE41	Number Theory and Cryptography	5	4	3	25	75	100
		PBMSDE42	Advanced Numerical Analysis						
		PBMSDE43	Optimization Techniques						
VBC2	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@	-	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

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

PSO1	Understand in depth knowledge in pure and applied mathematics.
PSO2	Attain the ability to solve challenging problems in Mathematics and prove abstract theorem.
PSO3	Know the specialized area of mathematics and its applications.
PSO4	Analyse practical problems and propose solution.
PSO5	Obtain the exact solutions for the 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 Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓				✓	✓	✓	
PSO2		✓	✓	✓	✓	✓	✓			
PSO3	✓	✓		✓	✓	✓		✓	✓	
PSO4	✓	✓		✓	✓		✓	✓	✓	
PSO5		✓	✓	✓	✓				✓	✓
PSO6	✓	✓		✓	✓	✓		✓	✓	
PSO7		✓	✓		✓	✓	✓	✓		
PSO8		✓	✓			✓	✓	✓	✓	✓
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
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 Course **(To choose 1 out of 3)**	PBPYDE11	1. Semiconductor Devices and Integrated circuits	6	4	3	25	75	100
		PBPYDE12	2. Computational Methods and Programming						
		PBPYDE13	3. Fundamental Concepts of Semiconductor						
			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
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 Course **(To choose 1 out of 3)**	PBPYDE21	1. Molecular Spectroscopy	6	4	3	25	75	100
		PBPYDE22	2. Astrophysics						
		PBPYDE23	3.Superconductivity						
			TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
DSC9	Discipline Specific Core Course	PBPY3001	Condensed Matter Physics-I	6	4	3	25	75	100
DSC10	Discipline Specific Core Course	PBPY3002	Nuclear and Particle Physics	6	4	3	25	75	100
DSC11	Discipline Specific Core Course	PBPY3003	Crystal Physics and Crystallography	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 Specific Elective Course **(To choose 1 out of 3)**	PBPYDE31	1. Physics of Thin Film	5	3	3	25	75	100
		PBPYDE32	2. Embedded System						
		PBPYDE33	3. Preparation and Properties of Nanomaterials						
			TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
DSC13	Discipline Specific Core Course	PBPY4001	Condensed Matter Physics-II	6	5	3	25	75	100
DSC14	Discipline Specific Core Course	PBPY4002	Characterization of Materials	6	4	3	25	75	100
DSC15	Discipline Specific Core Pract.	PBPYPR41	Practical IV Microprocessor and Computer Programming	5	4	6	25	75	100

The Part column values are: I (for DSC1–DSEI rows), II (for DSC5–DSE2 rows), III (for DSC9–DSE3 rows).

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 Course **(To choose 1 out of 3)**	PBPYDE41	1. Microprocessors and Microcontroller	5	4	3	25	75	100
		PBPYDE42	2. Digital Communications						
		PBPYDE43	3. Introduction to Spintronics						
VBC2	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@		-	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

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 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 inter-disciplinary concepts and for understanding and describing the natural phenomena.

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

PSO6 Provide exposure in 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 Specific Outcomes (PSOs)	Programme Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✔	✔		✔		✔	✔		✔	✔
PSO2	✔	✔	✔	✔		✔	✔		✔	✔
PSO3	✔	✔	✔	✔			✔	✔	✔	✔
PSO4	✔	✔		✔	✔		✔	✔	✔	✔
PSO5	✔	✔		✔		✔		✔	✔	✔
PSO6	✔	✔	✔	✔	✔	✔		✔	✔	✔
PSO7	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
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			

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				Course Structure for M.Sc. Chemistry **(For the Candidates admitted from the Academic Year 2022-2023)**						
I	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
	DSC4	Discipline Specific Core Pract.	PBCHPR11	Organic Chemistry Practical	6	4	6	25	75	100
	DSEI	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBCHDE11	1. Colorimetry and Kinetic Studies	6	4	6	25	75	100
			PBCHDE12	2. Metal Ion Estimation and Complex preparation and Kinetic Studies						
			PBCHDE13	3. Applied Catalysis						
				TOTAL	**30**	**22**	**-**	**125**	**375**	**500**
II	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
	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
	DSE2	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBCHDE21	1. Analysis of Organic and Inorganic Mixture	6	4	6	25	75	100
			PBCHDE22	2. Semi Micro Inorganic and Organic Qualitative Analysis						
			PBCHDE23	3. Medicinal Chemistry						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
III	DSC9	Discipline Specific Core Course	PBCH3001	Inorganic Chemistry III	6	4	3	25	75	100
	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
DSE3	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBCHDE31	1. Conductometric Titration and Organic Estimation	5	3	6	25	75	100
		PBCHDE32	2. Experimental methods in electrochemistry and estimation of Organic compounds						
		PBCHDE33	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
SEC1	Skill Enhancement Course (Project)	PBCHPJ41	Preparation of Organic compounds and Spectral Interpretation	5	4	6	25	75	100
OEC1	Other Elective Course (Pract.)	PBCHNMP4	Potentiometry and Spectral Interpretation	3	2	6	25	75	100
DSE4	Discipline Specific Elective (Pract.) **(To choose 1 out of 3)**	PBCHDE41	1. Project work ,Research Methodology and Spectral Interpretation	5	4	6	25	75	100
		PBCHDE42	2. Industrial training, Research Methodology and Spectral Interpretation						
		PBCHDE43	3. Preparation of Domestic Products						
VBC2	Value-Based Course		SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@	-	1	-	-	-	-
			TOTAL	30	24	-	150	450	600
			GRAND TOTAL	**120**	**90**	**-**	**575**	**1725**	**2300**

(Column IV spans the rows from DSC13 through VBC2.)

@   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

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 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, Molecular modeling, Drug discovery and Process Development.
PSO3	Utilize the basic knowledge on structure, reactivity, characterization and applications of chemicals in the development of novel chemical compounds.
PSO4	Handle the instruments employed in maintaining the quality and control of chemicals in the manufacturing process.
PSO5	Extract, elucidate the structure and synthesize natural products from the available sources

PSO6	Apply the knowledge of reactions and mechanism in the synthesis of new chemicals, their analysis and applications.
PSO7	Carry out any kind of project in the quality control, research and process development in chemical industry, enhancing the job opportunities of the students.
PSO8	Communicate and work collaboratively with Technologists and Environmentalists leading to sustainable living.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES WITH PROGRAMME OUTCOMES

Program Specific Outcomes (PSOs)	Program Outcomes (POs)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	✓	✓	✓	✓	✓	✓	✓	✓		
PSO2	✓	✓	✓	✓	✓	✓	✓	✓		
PSO3	✓	✓	✓	✓	✓	✓	✓			
PSO4	✓	✓	✓	✓	✓	✓	✓			
PSO5	✓	✓	✓	✓	✓	✓	✓	✓		
PSO6	✓	✓	✓	✓	✓	✓	✓	✓		
PSO7	✓	✓	✓	✓	✓	✓	✓			✓
PSO8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
				Course Structure for M.Sc. Bio-Chemistry **(For the Candidates admitted from the Academic Year 2022-2023)**						
I	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
	DSC4	Discipline Specific Core Pract.	PBBIPR12	Practical II – Isolation and estimation of Biomolecules	6	4	6	25	75	100
	DSEI	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBBIDE11	1. Human Physiology	6	4	3	25	75	100
			PBBIDE12	2. Stem cell technology						
			PBBIDE13	3. Virology						
				TOTAL	30	22	-	125	375	500
II	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
	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
	DSE2	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBBIDE21	1. Bio-analytical Techniques	6	4	3	25	75	100
			PBBIDE22	2. Proteomics and Genomics						
			PBBIDE23	3. Cancer Biology						
				TOTAL	30	22	-	150	450	600
III	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
	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
	DSE3	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBBIDE31	1. Ecology, Evolution and Biodiversity	5	3	3	25	75	100
			PBBIDE32	2. Plant Biochemistry						
			PBBIDE33	3. Animal Tissue Culture						
				TOTAL	30	22	-	150	450	600
IV	DSC13	Discipline Specific Core Course	PBBI4001	Genetics and Molecular Biology	6	5	3	25	75	100
	DSC14	Discipline Specific	PBBI4002	Molecular Endocrinology	6	4	3	25	75	100

		Core Course							
DSC15	Discipline Specific Core Pract.	PBBIPR41	Practical – VII Molecular Biology	5	4	6	25	75	100
SEC1	Skill Enhancement Course (Project)	PBCHPJ41	Project with Viva	5	4	6	25	75	100
OEC1	Other Elective Course	PBBINM41	Cell signaling & communication	3	2	3	25	75	100
DSE4	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBBIDE41	1. Applied Biotechnology	5	4	3	25	75	100
		PBBIDE42	2. Biostatistics and Bioinformatics						
		PBBIDE43	3. Pharmacology and Toxicology						
VBC2	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@		-	1	-	-	-	-
			TOTAL	30	24	-	150	450	600
			GRAND TOTAL	120	90	-	575	1725	2300

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PROGRAM SPECIFIC OUTCOME FOR MASTER OF BIOCHEMISTRY

Knowledge Domain

PSO1. Outline the structure and metabolism of macromolecule and its regulation, disorders of metabolic pathways.

PSO2. Acquire the knowledge of the molecular machinery of living cells, their participation in molecular recognition and signaling.

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 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 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 technique, bioinformatics, biostatics, genomic, proteomics.

POS7. Develop effective communication skill (oral and written) to represent the results of the experimental work and research, to pursue career in academic and different life science industries (Pharmaceuticals, Biotech, research, Hospital and community services). Acquire lifelong self

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

Value domain

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

Mapping PO Vs PSO

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

Semester	Part	Category	Course Code	Course Title	Hrs./Week	Credit	Exam. Hrs.	CIA	ESE	TOTAL
Course Structure for M.Sc. Bio-Technology **(For the Candidates admitted from the Academic Year 2022-2023)**										
I	**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
	DSC3	Discipline Specific Core Pract.	PBBTPR11	Practical - Microbiology and Microbial technology	6	4	4	25	75	100
	DSC4	Discipline Specific Core Pract.	PBBTPR12	Practical – FunctionalBiochemistry	6	4	4	25	75	100
	DSEI	Discipline Specific Elective **Course (To choose 1 out of 3)**	PBBTDE11	1. Human Physiology	6	4	3	25	75	100
			PBBTDE12	2. Stem Cell Technology						
			PBBTDE13	3. Virology						
				TOTAL	**30**	**22**	**-**	**125**	**375**	**500**
II	**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
	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
	DSE2	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBBTDE21	1. Bioanalytical Techniques	6	4	3	25	75	100
			PBBTDE22	2. Proteomics and Genomics						
			PBBTDE23	3. Cancer Biology						
				TOTAL	**30**	**22**	**-**	**150**	**450**	**600**
III	**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
	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
	DSE3	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBBTDE31	1. Ecology, Evolution and Biodiversity	5	3	3	25	75	100
			PBBTDE32	2. Plant Biochemistry						
			PBBTDE33	3. Biofertilizer technology						
				TOTAL	**30**	**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
DSE4	Discipline Specific Elective Course **(To choose 1 out of 3)**	PBBTDE41	1. Nanobiotechnology	5	4	3	25	75	100
		PBBTDE42	2. IPR, Biosafety and Ethics in Life Science						
		PBBTDE43	3. Bioentrepreneurship						
VBC2	Value-Based Course	SWAYAM / Online Spoken Tutorial by IIT Bombay - MOOC@		-	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 M.Sc Biotechnology programme

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

PSO 1: Evolve with recent innovations and scientific updates in various thrust areas of biotechnology in accordance with best scientific temperament, 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, environment, 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 team of students across disciplines.

PSO 7: Practice research & professional ethics as well as responsibility of SOPs.

PSO8: Evolve with recent innovations and scientific updates in the technological era in accordance with best scientific temperament, professional and research ethics throughout life.

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

Programme Specific Outcomes (PSOs)	Programme Outcomes (PO)									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PSO1	√	√	√		√	√	√	√	√	√
PSO2	√	√	√	√	√		√			
PSO3	√	√	√	√	√	√	√		√	√
PSO4	√	√		√		√		√	√	√
PSO5	√		√	√	√	√		√		
PSO6	√		√		√	√	√	√		
PSO7			√	√			√		√	√
PSO8	√	√			√		√		√	√
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

PREAMBLE

Eminent scholars are of the unanimous opinion that there is an urgent need to improve the standards of research carried out in the 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 such other problems, some radical changes have to be brought about in research, leading to the award of the degrees 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 instructions 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 under 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) A	Marks in Written Entrance Examination (Max 40 Marks) B	Marks in Interview / Oral Test (Max 10 Marks) C	Total Marks Secured (Max 100 Marks) 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 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.Philprogram consists of (a) Core courses which are mandatory for all students (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 Dissertation (20 credits)

6. EXAMINATION OF THEORY PAPERS

For full-time scholars, 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, 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 the 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 the 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 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 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.Program 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 are 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	O	10
86 – 95	A+	9
76 – 85	A	8
66 – 75	B+	7
55 – 65	B	6
00 – 54	F	0
Absent	Ab	0

Illustration of SGPA

Semester	Course	Credit	Grade Letter	Grade Point	Credit Point [Credit x Grade]
I	Course 1	5	A +	9	45
	Course 2	5	A	8	40
	Course 3	5	O	10	50
	Course 4	5	B	6	30
	Total	20			165
II	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 above without any arrear - First Class withDistinction

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 for 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 Holder. 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

Section A	To answer ALL the 5 Questions (Either or Type) One Question from each UNIT	5 x 6 = 30 Marks
Section B	To answer 3 Questions (out of 5 questions) One Question from each UNIT	3 x 15 = 45 Marks
TOTAL		75 Marks

RESEARCH ACTIVITIES OF THE COLLEGE

COLLEGE JOURNAL RELEASE:

The College has released an International Journal of Science and Humanities, ISSN- 2394 9236, Volume VII No. 1 January – June 2021

The College has released an International Journal of Science and Humanities, ISSN- 2394 9236, Volume VII No. 2 July – December 2021

PROJECT:

TNSCST – Student Project Scheme (2021-2022) – Apporved and Grant Released

S. No.	Guide Name and Institution Address	Title of the Project	Student Name	Project Code	Amount
1	Dr. Mohammed Kaleem Arshan Assistant Professor, Department of Biotechnology, Islamiah College (Autonomous), Vaniyambadi	In Silico Analysis of SARS – CoV-2 Spike Glycoprotein against FDA approved drugs	A. Dharani Selvan & M. Sedhuraman	BS - 743	7500/-
2	Dr. M. Aboobucker Sithique Assistant Professor, PG & Research Department of Chemistry, Islamiah College(Autonomous), Vaniyambadi	Extraction and Characterization of harmless mosquito repellent from the sees of Nuxvomica and wild-basil plants leaves	N. Sam Issac	CHE - 215	7500/-

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

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

SEM	COURSE CODE	COURSE	COURSE TITLE	INS HRS./ WEEK	CREDIT	EXAM HRS.	MAX MARKS		
							IA	EXAM	TOTAL
I	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
	MPHBPY04	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	MPHBPY05	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. PHYSICS

SEM	COURSE CODE	COURSE	COURSE TITLE	HRS./WEEK	CREDIT	EXAM HRS.	IA	EXAM	TOTAL
			COURSE STRUCTURE FOR M. Phil. CHEMISTRY						
							MAX MARKS		
I	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
	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
	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
II	MPHBCH05	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. BIOCHEMISTRY						
							MAX MARKS		
SEM	COURSE CODE	COURSE	COURSE TITLE	HRS./WEEK	CREDIT	EXAM HRS.	IA	EXAM	TOTAL
I	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
	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 Choosen According to Discipline Specific Elective Course)**	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
TOTAL				**-**	**40**	**-**	**100**	**500**	**600**

SEM	COURSE CODE	COURSE	COURSE TITLE	HRS./ WEEK	CREDIT	EXAM HRS.	MAX MARKS		
							IA	EXAM	TOTAL
I	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	MPHBBT05	Dissertation	Dissertation **(To be Choosen According to Discipline Specific Elective Course)**	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
TOTAL				**-**	**40**	**-**	**100**	**500**	**600**

The table title spanning the top: **COURSE STRUCTURE FOR M. Phil. BIOTECHNOLOGY**

		COURSE STRUCTURE FOR M. Phil. COMPUTER SCIENCE							
SEM	COURSE CODE	COURSE	COURSE TITLE	HRS./WEEK	CREDIT	EXAM HRS.	MAX MARKS		
							IA	EXAM	TOTAL
I	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
	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 Choosen According to Discipline Specific Elective Course)**	-	20	-	-	150	150
			Viva-Voce	-	-	-	-	50	50
TOTAL				-	40	-	100	500	600

			COURSE STRUCTURE FOR M. Phil. HISTORY						
SEM	**COURSE CODE**	**COURSE**	**COURSE TITLE**	**INS HRS./ WEEK**	**CREDIT**	**EXAM HRS.**	**MAX MARKS**		
							IA	**EXAM**	**TOTAL**
I	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
	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
	MPHBHI04	Discipline Specific Elective Course	Main Currents in the 20th Century Tamil Nadu	5	5	3	25	75	100
II	MPHBHI05	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. COMMERCE									
SEM	COURSE CODE	COURSE	COURSE TITLE	INS HRS/ WEEK	CREDIT	EXAM HRS	MAX MARKS		
							IA	EXAM	TOTAL
I	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
	MPHBCC03	Discipline Specific Course III	Research and Publication Ethics	5	5	3	25	75	100
	MPHBCO04	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 Choosen 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	**UBCSCC01**	Certificate Course in **'Web 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 Entrepreneur"**	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 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 practicing 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   (5×5 = 25)
Section – C 3 out of 5 questions – 10 marks each   (3×10=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 of 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 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 practicing 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 in 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 Department of Commerce (Finance & Accounts) with the Collaborations 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 Central Government / State Government as equivalent thereto may register for CAT Course and simultaneously study and appear or 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 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 Foundation Course (Entry Level) Part- I Examination shall be declared to have passed in 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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