# SAMASTIPUR COLLEGE SAMASTIPUR

#### **COURSE OUTLINE**

Samastipur College, Samastipur offers graduation program in two streams — Arts and Science. Students need to take either Rashtra Bhasha Hindi for 100 Marks or Rashtra Bhasha Non-Hindi (50 Marks) +Matri Bhasha (Maithili/Urdu/English)(50 Marks) and opt for one honours subject and two subsidiary subjects for the first two years (Part-I & Part-II). In the final year (Part-III) apart from the honours paper of 400 marks, there shall be a General Studies paper consisting of 100 marks. In each part, attaining at least 45% marks (in each Honours paper) separately in theory and in the practical paper is compulsory. In the subsidiary papers, language papers and in the General Studies papers, obtaining 33% is a must for being declared successful.

Students opting for Arts stream need to take any one of the following subjects as Honours paper and any two subjects from the remaining ones as subsidiary papers for the first two years (Part-I & Part-II).

Arts – English, Hindi, Maithili, Urdu, Economics, Political Science, History, Ancient Indian History, Psychology, Philosophy

Students opting for Science stream can choose one of the following combinations for the first two years (Part-I & Part-II):

Physics (Hons.), Chemistry, Mathematics Mathematics (Hons.), Physics, Chemistry Chemistry (Hons.), Physics, Mathematics Chemistry (Hons.), Botany, Zoology Botany (Hons.), Chemistry, Zoology Zoology (Hons.), Chemistry, Botany

The course outlines are as below:

# **B.A. Political Science (Honours)**

Year	Paper	Paper Name	Marks
Do at 1	Paper I	Basic Principles of Political Theory	100
Part I	Paper II	Indian Political Thought	100
Part II	Paper III	Indian Government and Politics	100
Partii	Paper IV	Comparative Government and Politics	100
	Paper V	Public Administration	100
	Paper VI	International Politics	100
	Paper VII	Western Political Thoughts	100
Part III	Paper VIII	(A) Politics of Developing Countries	100
		(B) Major Issues in Contemporary Politics	
		(C) Women and the Political Process	
		(D) Political Ideologies	

### **B.A. Political Science (Subsidiary & General)**

Year	Paper Name	Marks
Part I	Political Theory	100
Part II	Comparative Government and Politics	100

### **B.A. Economics (Honours)**

Year	Paper	Paper Name	Marks
D I I	Paper I	Micro Economics	100
Part I	Paper II	Indian Economy and Contemporary Bihar	100
Dort II	Paper III	Macro Economics	100
Part II	Paper IV	International Economics	100
	Paper V	Development Theory and Experience	100
	Paper VI	Political Economy	100
Part III	Paper VII	(A) Essential Statistics for Economics	100
Partin		(B) Business Organization & System	
	Paper VIII	(A) Essential Mathematics for Economics	100
		(B) Agricultural Economics	

### **B.A. Economics (Subsidiary & General)**

Year	Paper Name	Marks
Part I	Introductory Economics	100
Part II	Indian Economy	100

# **B.A.** History (Honours)

Year	Paper	Paper Name	Marks
Part I	Paper I	History of India upto 1200 AD	100
Parti	Paper II	The Rise of Modern West (Mid 15 <sup>th</sup> to 18 <sup>th</sup> Century)	100
Dort II	Paper III	History of India (1200-1526)	100
Part II	Paper IV	History of Modern Asia (1839-2000)	100
	Paper V	History of India (1526-1750)	100
Part III	Paper VI	History of India (1757-1947)	100
	Paper VII	History of Modern World (1776-2000)	100
	Paper VIII	Contemporary India (1947-2000)	100

# **B.A. History (Subsidiary & General)**

Year	Paper Name	Marks
Part I	History of India upto 1526	100
Part II	History of India	100

### **B.A. Psychology (Honours)**

Part I	Paper I	General Psychology	75
	Paper II	Social Psychology	75
	Practical	Experiment in Psychology	50
	Paper III	Psychopathology	75
Part II	Paper IV	System in Psychology	75
	Practical	Psychological Assessment and Statistics	50
	Paper V	Statistics in Psychology	100
Part III	Paper VI	Organizational Psychology	100
	Paper VII	Research Methodology	100
	Paper VIII	Experiment in Psychology	100

### **B.A. Psychology (Subsidiary & General)**

Year	Paper Name	
Part I	Fundamental Psychology	75
	Practical	25
Part II	Psychopathology	75
	Practical – Testing & Statistics	25

# **B.A. Philosophy (Honours)**

Year	Paper	Paper Name	Marks
Dowt	Paper I	Indian Philosophy	100
Part I	Paper II	Modern Western Philosophy	100
Part II	Paper III	Indian Logic	100
Partii	Paper IV	Western Logic	100
	Paper V	Indian and Western Ethics	100
	Paper VI	Indian Epistemology and Metaphysics	100
Part III	Paper VII	Western Epistemology and Metaphysics	100
Partin	Paper VIII	(A) Classical Texts	100
		(B) Philosophy of Religion	
		(C) Social and Political Philosophy	

### **B.A. Philosophy (Subsidiary & General)**

Year	Paper Name	Marks
Part I	Indian Philosophy	100
Part II	Indian and Western Ethics	100

### **B.A. Ancient Indian History (Honours)**

Year	Paper	Paper Name	Marks
Davit I	Paper I	Political History of Ancient India upto 1200 AD	100
Part I	Paper II	Ancient Indian Societies & Economy	100
Dort II	Paper III	Polity and Administration in Ancient India	100
Part II	Paper IV	Art and Architecture in Ancient India	100
	Paper V	Pre and Proto Historic Archaeology	100
Down III	Paper VI	Epigraphy and Numismatic in Ancient India	100
Part III	Paper VII	Elements of Ancient Indian Culture	100
	Paper VIII	Museology, Tourism and Excursion	100

### **B.A. Ancient Indian History (Subsidiary & General)**

Year	Paper Name	Marks
Part I	Political History of Ancient India upto 1200 AD	100
Part II	Socio-economic History of Ancient India	100

# **B.Sc. Physics (Honours)**

Year	Paper	Paper Name	Marks
	Paper I	<ul> <li>(A) Mathematical Physics and Properties of Matter</li> <li>(B) Special theory of Relativity, Oscillations, Waves &amp; Accoustics</li> </ul>	75
Part I	Paper II	(A) Thermal Physics (B) Electrostatics and Magnetism	75
	Practical		50
Do at II	Paper III	(A) Optics (B) Electromagnetic Waves & Electrodynamics Mazwell's Equation	75
Part II	Paper IV	(A) Electricity (B) Basic Electronics	75
	Practical		50
	Paper V	(A) Classical Mechanics and Quantum Mechanics (B) Statistical Physics	100
Part III	Paper VI	(A) Nuclear Physics and Cosmic Ray (B) Condensed Matter Physics	100
	Paper VII	(A) Atomic Spectroscopy (B) Molecular Spectroscopy and Lasers	100
	Paper VIII	Practical	100

### **B.Sc. Physics (Subsidiary & General)**

Year	Paper Name	Marks
	(A) Mathematical Physics, STR, Mechanics	75
Dowt	(B) General Properties of Matter, Waves, Oscillations and Acoustics	
Part I	(C) Thermal Physics, Computer Fundamentals and Electronics	
	Practical	25
	(A) Optics	75
Dowt II	(B) Electromagnetic theory, X-rays and Laser	
Part II	(C) Electrostatics, Current Electricity, Magnetism and Nuclear Physics	
	Practical	25

# **B.Sc. Chemistry (Honours)**

Year	Paper	Paper Name	Marks
	Paper I	(A) Physical Chemistry	75
		(B) Inorganic Chemistry	
Part I	Paper II	(A) Physical Chemistry	75
		(B) Organic Chemistry	
	Practical		50
	Paper III	(A) Physical Chemistry	75
		(B) Inorganic Chemistry	
Part II	Paper IV	(A) Physical Chemistry	75
		(B) Organic Chemistry	
	Practical		50
	Paper V	Physical Chemistry	100
Part III	Paper VI	Inorganic Chemistry	100
Partill	Paper VII	Organic Chemistry	100
	Paper VIII	Practical	100

# **B.Sc. Chemistry (Subsidiary & General)**

Year	Paper Name	Marks
	Group A	75
Dowt	Group B	
Part I	Group C	
	Practical	25
Part II	Group A	75
	Group B	
	Group C	
	Practical	25

# **B.Sc. Botany (Honours)**

Year	Paper	Paper Name	Marks
	Paper I	(A) Algae	75
		(B) Mycology and Phytopathology	
Dort		(C) Microbiology	
Part I	Paper II	(A) Bryophyta	75
		(B) Pteridophyta	
	Practical		50
	Paper III	Biology of Seed Plants	75
Part II	Paper IV	Development of Plants and their uses	75
	Practical		50
	Paper V	(A) Cell Biology	100
		(B) Genetics and Plant Breeding	
	Paper VI	(A) Biochemistry	100
Part III		(B) Plant Physiology	
Partin	Paper VII	(A) Molecular Biology	100
		(B) Biotechnology	
		(C) Ecology and Environmental Biology	
	Paper VIII	Practical	100

### **B.Sc. Botany (Subsidiary & General)**

Year	Paper Name	Marks
	(A) Cryptogams	75
Part I	(B) Cell Biology, Genetics and Applied Botany	
	Practical	25
	(A) Angiosperms, Taxonomy	75
Dowt II	(B) Anatomy and Embryology	
Part II	(C) Plant Physiology and Ecology	
	Practical	25

# **B.Sc. Zoology (Honours)**

Year	Paper	Paper Name	Marks
	Paper I	(A) Animal Diversity – I	75
		(B) Environmental Biology & Animal Behavior	
Part I	Paper II	(A) Animal Diversity – II	75
		(B) Developmental Biology	
	Practical		50
	Paper III	(A) Cell Biology	75
		(B) Genetics	
Part II	Paper IV	(A) Reproductive Biology	75
		(B) Biometry	
	Practical		50
	Paper V	(A) Biochemistry	100
		(B) Physiology and Endocrinology	
	Paper VI	(A) Biotechnology and Immunology	100
Part III		(B) Evolution and Zoogeography	
	Paper VII	(A) Medical Zoology	100
		(B) Economic Zoology	
	Paper VIII	Practical	100

### **B.Sc. Zoology (Subsidiary & General)**

Year	Paper Name	Marks
	(A) Animal Diversity – I	75
Part I	(B) Animal Diversity – II	
	Practical	25
	(A) Cell Biology and Biochemistry	75
Part II	(B) Physiology, Endocrinology and Developmental Biology	
	Practical	25

# **B.Sc. Mathematics (Honours)**

Year	Paper	Paper Name	Marks
Part I	Paper I	Arithmetic	100
Parti	Paper II	Analytical Geometry and Trigonometry	100
Part II	Paper III	Calculus	100
Partii	Paper IV	Modern Algebra	100
	Paper V	Higher Analysis, Complex Variables, Metric and Topological Spaces	100
	Paper VI	Ring Theory, Linear Spaces	100
Part III	Paper VII	Dynamics	100
Part III	Paper VIII	Functional Analysis, Numerical Analysis, Principles of Computer	100
		Science, Topology, Number Theory, Spherical Trigonometry and	
		Astronomy, Probability Theory, Biomathematics	

### **B.Sc. Mathematics (Subsidiary & General)**

Year	Paper Name	Marks
	(A) Set Theory, Modern Algebra and Linear Algebra	100
Part I	(B) Real Analysis	
	(C) Analytic Geometry of Two and Three Dimensions	
	(A) Calculus	100
Part II	(B) Vector Analysis	
	(C) Mechanics	

#### OUTLINE OF THE CHOICE BASED CREDIT SYSTEM (CBCS) for PG degree courses:

It consists of a number of courses i.e. Core Course (CC), Elective Course (EC), Discipline Specific Elective Course (DSE), Ability/Skill Enhancement Courses (AEC/SEC), and Ability Enhancement Compulsory Courses (AECC). Each course is equivalent to a paper. The nature of these courses is defined below:

#### 1.1 Core Course (CC):

A course which should compulsorily be studied by a candidate as a core requirement on the basis of subject of M.Sc. studies and is termed as a Core course.

#### 1.2. Elective Course (EC):

Generally a course which can be chosen from a pool of courses (Basket) and which may be very specific or specialized or advanced or supportive to the subject/ discipline of study or which provides an extended scope or which enables an exposure to some other subject/discipline/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

#### 1.3 Discipline Specific Elective Course (DSE):

Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/ institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).

#### 1.4 Generic Elective (GE) Course:

An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.

#### 1.5 Ability Enhancement Courses (AEC/SEC):

The Ability Enhancement Courses (AEC) / Skill Enhancement Courses (SEC). "AEC/SEC" is the courses based upon the content that leads to life skill enhancement.

#### 1.6 Ability Enhancement Compulsory Courses (AECC):

University will run a number of Ability Enhancement Compulsory Courses (AECC) which is qualifying in nature and student from all faculties have to qualify in all such courses.

#### 1.7 Dissertation/Project/Internship/Industrial Training/Field Work:

Elective courses are designed to acquire advanced knowledge to supplement/support the main subject through project work/ internship/ industrial training/ field work. A student studies such a course on his/her own with mentoring support by a teacher / faculty member called the guide/supervisor. In case of internship/ industrial training the student will work under the joint Guidance of one teacher-supervisor from the parent department to be termed as Supervisor-1 and one suitably qualified personnel at the research institute/ research laboratory/ industrial organization, to be termed as Supervisor-2. A student may join any recognized research institute/ research laboratory/ the industrial organization with the approval of parent department. The student has to work for a minimum number of days/ hour as decided by the parent department. On completion of the project work/ training at the research institute/ research laboratory/ industrial organization, student will submit a written project report certified by both supervisors to the parent department. Supervisor-2 will issue a letter certifying that the candidate has successfully completed the project and also award marks/ grade to him/ her. The certificate will be submitted to the parent department confidentially. The Board of Courses of Studies (BOCS) of the concerned subject/

department will draft and design the certificate and other documents as per requirement. The parent department will also assist the students to choose proper organizations for their project work/ industrial training/ field work etc. The student can also do Project dissertation work in parent department on selected topic under the supervision of teacher of the department.

#### 2.0 CREDIT

The total minimum credits, required for completing a PG program is 100. The details of credits for individual components and individual courses are given in Table.1.

Table 1: Structure of the 2 Yrs (Four Semesters) Post Graduate Degree course under CBCS:

100	ie 1. Structure	or the 2 ms (n	our Semesters) P	ost Graduate L	egree course o	illuel CBC3.	
Semest er	No of Course / paper	Credit per Course / paper	Total credit	Minimum No. of Learning Hours	No of CORE COURSE/ PAPER	No of ELECTIVE COURSE / PAPER	Code and Nature of Elective Course / paper
I	5	5	25	250	4	_	AECC-1
			SEMESTER B	REAK			
Ш	6	5	30	300	5	1	AEC-1
			SEMESTER B	REAK			
Ш	6	5	30	300	5	1	AECC-2
			SEMESTER B	REAK			
IV	3	5	t5	150	0	4	EC.1* EC2* DSE-I or GEI
Total	20		100	1000	t4	6	

#For Tutorial (T)/ Practical (P)/ Field Work (FW)/ Internship etc. extra working hour to be added as per requirement and will be decided by the BOCS of the respective subject.

<sup>\*</sup> The two Elective Courses (EC)to be studied in semester IV may be One Theory paper and One Practical paper

/One Theory paper and One Project work / Both Project work/ Internship

IMP: It is desirable that all students of all courses be given adequate exposure over and above the class room teaching to enhance the scope of skill development/ entrepreneurship and employability.

- 2.1. There shall be six elective courses two EC, one DSE or one GE, two AECC, one AEC/SEC. Students may opt for any elective course out of a list of elective papers (Basket) offered by the parent department or any other department/s as per his/her choice with the prior permission of the parent department. The list of elective papers, syllabus and prerequisite of the elective course will be as decided by the Board of Courses of Studies (BOCS) of the concerned subject/ department. All elective course listed may not be available in all semesters. Based on the availability of resource persons and infrastructure the parent department will assist the students to select elective courses of their choice.
- 2.2. The final CGPA/ class will be decided on the performance of the student in the 16 courses/papers including the 14 Core Courses (CC) / papers and two Elective Courses (EC)/ papers.
- 2.3. The one DSE or one GE, two AECC, one AEC/SEC papers will be qualifying in nature and a student has to score at least 45% marks in these papers. Grade will be awarded separately for these courses, however, performance in these elective courses/ papers will not be considered for awarding the final CGPA/ class.

#### 2.4. Ability Enhancement Compulsory Courses (AECC):

University will run two Ability Enhancement Compulsory Courses (AECC) which are qualifying in nature and a student has to qualify in both these courses. The courses are:

#### AECC-1

Environmental Sustainability (3 Credit) & Swachchha Bharat Abhiyan Activities (2 credit)

#### AECC-2

Human Values & Professional Ethics (3 credits) and Gender sensitization (2 credits)

Student will do assignments/project work related to institutional social responsibilities including swachchha Bharat Abhiyan activities during SEMESTER BREAK.

2.5. University will run a number of Ability Enhancement Courses (AEC)/ Skill Enhancement Courses (SEC); a student can choose one from these. For example:

Basket of Ability Enhancement or Skilled Enhancement Courses (AEC/SEC)

- Computers and IT Skill
- Financial Risk Management/
- Solid waste Management/
- Mushroom Culture /
- Bio-fertilizerproduction/
- Environmental Law/
- Tourism and Hospitality Management/
- Yoga Studies

etc.

#### 2.6 Discipline Specific Elective (DSE):

In each subject the CC-5 being taught in the second semester will be open to be selected as a DSE paper. In the first phase a student will be allowed to choose a paper from any subject other than his/her Core Course (CC) from the same faculty in the same university.

#### 2.7 Generic Elective (GE) Course:

University will run a number of Generic Elective Courses (GE); a student can choose one from these. For example:

Basket of Generic Elective (GE) courses

- Music
- Dramatics
- Fine Arts
- Graphic Design
- Inclusive Policies
- Human Rights
- Any such course run by any department

# M.A. Economics (CBCS)

Outline of M. A. Economics Programme

		SEMESTER I	
S. No.	Course Code	Course / Papers	Credits
1.	CC - 1	Micro Economics Analysis- I	5
2.	CC - 2	Macro Economic Analysis - I	5
3.	CC-3	Mathematical Methods	5
4.	CC-4	History of Economic Thought	5
5.	AECC-1	Environmental Sustainability (3 credits) & Swachchha Bharat Abhiyan Activities (2 credits)	5
		Total Credits	25
		SEMESTER II	
S. No.	Course Code	Course / Papers	Credits
1.	CC - 5	Indian Economy - Issues & Policies - I	5
2.	CC - 6	Economics of Growth & Development - I	5
3.	CC - 7	Microeconomic Analysis-II	5
4.	CC - 8	Macroeconomic Analysis-II	5
5.	CC-9	Statistical Methods	5
6	AEC – I	Any one from Basket of Ability Enhancement Courses	5
		Total Credits	30

		SEMESTER III	
S. No.	Course Code	Course / Papers	Credits
1.	CC-10	Indian Economy - Issues & Policies-II	5
2.	CC-11	Economics of Growth& Development-II	5
3.	CC-12	Public Economics	5
4.	CC-13	International Economics	5
5.	CC-14	Research Methodology	5
6	AECC - 2	Human Values and Professional Ethics (3 credits) & Gender Sensitization (2 credits)	5
		Total Credits	30

# M.A. Economics (CBCS) (continued)

		SEMESTER IV	4777
S. No.	Course Code	Course / Papers	Credits
		(A) Agricultural Economics	
		(B)Industrial Economics-I	
		(C)Basic Econometrics	
1	EC I	(D)Monetary Economics & Policy	- 5
1.	1. EC-1 (E)Indian Public Finance (F)Urban Economics	(E)Indian Public Finance	3
		(F)Urban Economics	
		(G)Financial Economics-I	
		(H) Environmental Economics	
		(A)Indian Banking & Financial Institutions	
		(B)Industrial Economics-II	
		(C)Demography	
	EC-2	(D) Agri - Business Management	
2.	EC-2	(E)Labour Economics	5
		(F) Gender Economics	
		(G) Financial Economics -II	
		(H) Time Series Econometrics	
		(I) Project Work	
	DSE - I	(A) Fundamentals of Economics	
	B00000 500	(B) Indian Rural Development	
3.	Or	(C) Planning And Economic Development in India	5
		(D) Personnel Management & Industrial Relation	
	GE-1	May opt one from Basket of Generic Courses	
		Total Credits	15

# M.A. History (CBCS)

MA. History	
Semester – 1	
00.1.	Historiography
CC - 1:	History of Early Civilizations and Medieval world.
CC - 2:	Early Medieval India
CC-3:	Science & Technology in India
CC - 4:	: Environmental Sustainability (3 Credits) &
AECC - I	Swachchh Bharat Abhiyan Activities (2 Credits)
Semester	r -2
CC-5:	History of Ideas.
CC-6:	History of Europe & Modern world.
CC - 7:	History of Bihar (from the Earliest time).
CC - 8:	Society and Economy in Indian History.
CC-9:	Contemporary India – 1947 onwards
AEC 1:	- IT Skill Development
Semeste	r 3
00 10	National Movement in India
CC - 10:	Indian Historians
CC - 11:	
CC - 12:	South Asia – 1950 onwards.
CC - 13:	USA - 1860 - 1990
CC - 14:	Revolution and Revolutionary thought.
DSE- 2:	Human Values & Professional Ethics (3 Credits) & Gender Sensitization (2 Credits)
Semeste	er – 4
Elective	e Course (EC) - 1
a	no the first services and the services are the services and the services are the services and the services are the services a
b	
c	
	Environmental Movements
Electiv	e Course (EC) - 2
	) Indian Theatre
	indian Cinema
	) Media
	Human Rights
DSE-1	
or	
GE-I	

### M.A. English (CBCS)

CC - 1: English Poetry from Chaucer to Milton

CC-2: Shakespearean Drama

Pre- Elizabellar Drana to 17th

CC - 4: Late 17th and 18th Century Literature

AECC-1: Environmental Sustainability (3 Credits) &Swachchh Bharat Abhiyan Activities (2 Credits)

#### Semester 2

CC-5: Film and Literature

CC- 6: 19th Century Poetry

CC - 7: Classical & English Criticism

CC-8: Indian and Western Literary Theory

CC-9: : 19th Century Fiction and non-fiction

AEC 1:

#### Semester 3

CC - 16: Modern and Contemporary Poetry

CC - 11: Medern and Contemporary Drama

CC - 12: Modern and Contemporary Fiction

CC - 13: Indian Literature in English & in Translation

CC - 14: Linguistics

AECC 2: Human Values & Professional Ethics (3 Credits)

& Gender Sensitization (2 Credits)

#### Semester 4

#### Elective Course (EC) 1

a) New Literatures

17.

b) American Literature

c) Women's Literature

d) 16th and 17th Century Prose

e) Cultural Studies

#### Elective Course (EC) 2

- a) Translation Theory and Practice
- b) Partition narratives
- c) Writing in English from Bihar
- d)European Fiction in English Translation

DSE-1

GE-1

# M.A. Political Science (CBCS)

emester	Course/ Paper Code	Nature of Course/ Paper	Marks	Marks of CIA	Marks of ESE	Passing criterion	Qualifying Criterion
	MPOL CC-1	Political Theory	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
R 1	MPOL CC-2	Western Political Thought	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
SEMESTER I	MPOL CC-3	Comparative Politics: Concept and Model	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
SEN	MPOL CC-4	International Relations: Theories and Approaches	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
	MPOLA ECC-1		100	50	50	45% in CIA 45% in ESE	Qualifying
	MPOL CC- 5/MPO LDSC- 1	Introduction To Public Administration	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
ER II	MPOL CC-6	Foreign Policy of major Powers	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
SEMESTER II	MPOL CC-7	Contemporary Issues in International Relations	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
SE	MPOL CC-8	Indian Politial Thought	100	30	70	45% in CIA 45% in ESE	Marks decide
	MPOL CC-9	Political Processes and Governance in India	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
	MPOLA EC-1		100	50	50	45% in CIA 45% in ESE	Qualifying
	MPOL CC-10	Political Institutions and Practices in India	100	30	70	45% in CIA 45% in ESE	Marks decide
_	MPOL CC-11	Research Methodology	100	30	70	45% in CIA 45% in ESE	Marks decide class/ CGPA
TER II	MPOL CC-12	State Politics	100	30	70	45% in ESE 45% in ESE	Marks decided class/ CGPA
SEMESTER	MPOL CC-13	India's Foreign Policy	100	30	70	45% in CIA 45% in ESE	Marks decid
S	MPOL CC-14	Political and Social Movements	100	30	70	45% in CIA 45% in ESE	Marks decid class/ CGPA
	MPOL AECC-2		100	50	50	45% in CIA 45% in ESE	Qualifying

### M.A. Political Science (CBCS) (continued)

	MPOL EC-1	Subject specific elective International Trade and Global Politics	100	Will be decided by the BOCS	Will be decided by the BOCS	45% in CIA 45% in ESE	Marks decide class/ CGPA
	MPOL EC-2	Subject specific elective Indian Administrative System	100	Will be decided by the BOS	Will be decided by the BOS	45% in CIA 45% in ESE	Marks decide class/ CGPA
	MPOL EC-3	Subject specific elective Defence and Strategic Issues in India	100	Will be decided by the BOCS	Will be decided by the BOCS	45% in CIA 45% in ESE	Marks decide class/ CGPA
	MPOL EC-4	Subject specific elective Global South in World Affairs	100	Will be decided by the BOCS	Will be decided by the BOCS	45% in CIA 45% in ESE	Marks decide class/ CGPA
SEMESTER IV	MPOL EC-5	Subject specific elective South Asia in International Politics	100	Will be decided by the BOCS	Will be decided by the BOCS	45% in CIA 45% in ESE	Marks decide class/ CGPA
SEMES	MPOL EC-6	Subject specific elective Introduction to International Law	100	Will be decided by the BOCS	Will be decided by the BOCS	45% in CIA 45% in ESE	Marks decide class/ CGPA
	MPOL DSE - 1	Discipline Specific Elective Public Administrative	100	30	70	45% in CIA 45% in ESE	Qualifying
	or MPOL GE-1	Generic Elective – may be unrelated to subject / across the faculty International Organization	100	30	70	45% in CIA 45% in ESE	Qualifying
	MPOL GE-2	Generic Elective – may be unrelated to subject / across the faculty Resource Scarcity and Environment Security	100	30	70	45% in CIA 45% in ESE	Qualifying

# M.A. Psychology (CBCS)

Semest er	Course Code	Name of paper	Mar ks	Marks of CIA	Marks of ESE	Passing criterion	Qualifying cr	iterion
Semest er-I	CC-1	ADVANCED GENERAL PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-2	ADVANCED SOCIAL PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-3	RESEARCH METHODOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-4	EXPERIMENTS IN PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	AECC- 1		100	30	70	45% marks in CIA 45% marks in ESE	Qualify	
Semest er-2	CC-5	COGNITIVE PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-6	NEUROPSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-7	PSYCHOPATHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-8	STATISTICS FOR PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-9	PSYCHOLOGICAL ASSESSMENT	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	AEC-1		100	30	70	45% marks in CIA 45% marks in ESE	Qualify	
Semest er-3	CC-10	HEALTH PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-11	COUNSELLING PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-12	EDUCATIONAL PSYCHOLOGY	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-13	HUMAN RESOURCE MANAGEMENT	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	CC-14	GENERAL COUNSELLING	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	AECC-		100	30	70	45% marks in CIA 45% marks in ESE	Qualify	
Semest er-4	EC-1	CUNICAL PSYCHOLOGY/ ORGANISATIONAL BEHAVIOUR/ POSITIVE PSYCHOLOGY/ PSYCHOMETRICS/ COMPUTER APPLICATION IN PSYCHOLOGY- PAPER-1	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	EC-2	-DO- PAPER-2	100	30	70	45% marks in CIA 45% marks in ESE	Marks class/CGPA	decide
	DSE-1		100	30	70	45% marks in CIA 45% marks in ESE	Qualify	
	OR GE-1		100	30	70	45% marks in CIA 45% marks in ESE	Qualify	

# M.Sc. Botany (CBCS)

# Course Structure for M.Sc. Botany

				101 1		otany		
Semester	Course/Paper code	Nature of Course / Paper	Credit	Marks	Marks of CIA	Marks of ESE	Passing criterion	Qualifying Criterion
	MBOTCC-1	Phycology, Mycology and	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
l		Bryology						
	MBOTCC-2	Microbiology and Plant Pathology	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEMESTER I	MBOTCC-3	Pteridophyta, Gymnosperm and Paleobotany	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEM	MBOTCC-4	Practical 1 (Based on MBOTCC 1,2 &3)	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
	MBOTAECC-1	Environmental Substainability & wachchha Bharat Abhiyan Activities	5	100	50	50	45% CIA 45% in ESE	Qualifying
	MBOTCC-5 DSE-1 for other Department	Biofertilizer Technology	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
	MBOTCC-6	Taxonomy & Anatomy & Embryology	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEMESTER II	MBOTCC-7	Physiology and Biochemistry	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEMES	MBOTCC-8	Plant Tissue Culture, Ethanobotany, Biodiversity & Biometry	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
	МВОТСС-9	Practical 2 (Based on MBOTCC 5,6, 7 & 8)	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
	MBOTAEC-I / SEC - I	Ability Enhancinn Elective course selected from Basket	5	100	50	50	45% CIA 45% in ESE	Qualifying
	MBOTCC-10	Cell Biology & Cytogenetics	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
	MBOTCC-11	Molecular Biology	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
IR III	MBOTCC-12	Recombinant DNA Technology	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEMESTER III	MBOTCC-13	Plant Ecology & Environmental Science	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEN	MBOTCC-14	Practical 3 (Based on MBOTCC 10, 11, 12, & 13)	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
	MBOTAECC-2	Human Values & Professional Ethics and Gender Sensitization	5	100	50	50	45% CIA 45% in ESE	Qualifying
RIV	MBOTEC-1	Subject specific elective	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEMESTER IV	MBOTEC-2	Subject specific elective	5	100	30	70	45% CIA 45% in ESE	Marks deciding class / CGPA
SEN	MBOTDSE-1	Opt a Course from other Department	5	100	30	70	45% CIA 45% in ESE	Qualifying

# M.Sc. Physics (CBCS)

Code	Subject	Credits	E.S.E.	C.I.A.	Total
MPHYCC-1			70	30	100
		5	70	30	100
MPHYCC-2	Mathematical Physics		A10.70	1,000	100
MPHYCC-3	Quantum Mechanics	5	70	30	
MPHYCC-4	Lab-I	5	70	30	100
MPHYAECC-1	Environmental Sustainability (3 Credits) and Swachchha Bharat Abhiyan Activities (2 Credits)	5	70	30	100
	Semester II (January to	June)			
Code	Subject	Credits	E.S.E.	C.I.A.	Total
MPHYCC-5	Modeling and Simulation	5	70	30	100
МРНҮСС-6	Electrodynamics and Plasma Physics	5	70	30	100
MPHYCC-7	Electronics I	5	70	30	100
MPHYCC-8	Statistical Mechanics	5	70	30	100
МРНҮСС-9	Lab-II	5	70	30	100
MPHYAEC-1	Any one of the followings: Computers and IT Skill Web Designing Financial Risk Management/ Solid waste Management/ Mushroom Culture / Bio-fertilizer production/ Environmental Law / Tourism & Hospitality Management/ Lifeskill & skill development /	5	70	30	100

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# M.Sc. Physics (CBCS) (continued)

	Semester III (July to Dec	ember)			
Code	Subject	Credits	E.S.E.	C.I.A.	Total
MPHYCC-10	Atomic and Molecular Physics	5	70	30	100
MPHYCC-11	Condensed Matter Physics	5	70	30	100
MPHYCC-12	Electronics II	5	70	30	100
MPHYCC-13	Nuclear and Particle Physics	5	70	30	100
MPHYCC-14	Lab-III	5	70	30	100
МРНҮАЕСС-2	Human Values and Professional Ethics (3 Credit) and Gender Sensitization (2 Credit)	5	70	30	100
	Semester IV (January to	June)		Tuesday.	
Code	Subject	Credits	E.S.E.	C.I.A.	Total
MPHYEC-1	Elective Paper I	5	70	30	100
	Elective Paper II Part 1: Practical – 50 marks Part 2: Dissertation – 50 marks	5	70	30	100
Or MPHYGE-1	For MPHYDSE-1, in each subject the CC / paper -5 being taught in the second semester will be open to be selected as a DSE paper. In the first phase a student will be allowed to choose a paper from any subject other than his/ her Core Course (CC) from the same faculty in the same university.	5	70	30	100
	For MPHYGE-1, a student can choose any one from the following:  Music  Dramatics  Fine Arts  Graphic Design  Inclusive Policies  Human Rights  Any course run by any department				

# M.Sc. Physics (CBCS) (continued)

Elective T	heory Pape	Elective-I Code: I ers for Semester 4 (One to be sel-	PHYEC-1 ected from the	following	set of 1	0 opti	ons)
Code		Subject	Credits	E.S.E.	C.I./	۸.	Total
MPHYEC-1	Advance	ed Quantum Mechanics	5	70	30		100
	Advance	ed Condensed Matter Physics					
	Atmosp	heric Physics					
	Biophys	ics					
	Lasers a	nd Photonics					
	Measure	ement and Instrumentation					
	Comput	ational Methods					
	Nano Sc	rience					
	Plasma	Physics					
		Physics and Crystallography					
	Energy S	Science					
	Environ	mental Physics					
		one of the topics from the set of ny topic on Physics	ionowing			y <del>111-7</del> 733-1-10	- statem
options: Part 2: Disser			ionowing			. C.I.	
			ionowing	Credits	E.S.E.		Tota
Part 2: Disser	tation on a	ny topic on Physics Subject				A.	
Part 2: Disser		ny topic on Physics Subject Advanced Quantum Mechani	CS	Credits	E.S.E.		
Part 2: Disser	tation on a	ny topic on Physics Subject Advanced Quantum Mechani Advanced Condensed Matter	CS			A.	
Part 2: Disser	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics	CS			A.	Total
Part 2: Disser	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics	CS			A.	
Part 2: Disser	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics	cs Physics			A.	
Part 2: Disser Code	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics  Measurement and Instrumentat	cs Physics			A.	
Part 2: Disser	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics	cs Physics			A.	
Part 2: Disser Code	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics  Measurement and Instrumentat Computational Methods Nano Science	cs Physics			A.	
Part 2: Disser Code	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics  Measurement and Instrumentat Computational Methods	cs Physics			A.	
Part 2: Disser Code	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics  Measurement and Instrumentat Computational Methods Nano Science	cs Physics			A.	
Part 2: Disser Code	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics  Measurement and Instrumentat Computational Methods Nano Science Plasma Physics Crystal Physics and X – Ray	cs Physics			A.	
Part 2: Disser Code	tation on a	Advanced Quantum Mechani Advanced Condensed Matter Atmospheric Physics Biophysics Lasers and Photonics  Measurement and Instrumentat Computational Methods Nano Science Plasma Physics Crystal Physics and X – Ray Crystallography	cs Physics			A.	

# M.Sc. Zoology (CBCS)

Semester	Paper	Paper Name	CIA	ESE
_	CC-1	Functional Biology of Invertebrates and Chordates	30	70
er-	CC-2	Molecular Cell Biology	30	70
Semester-	CC-3	Genetics	30	70
eπ	CC-4	Practical	30	70
01	AECC-1		50	50
	CC-5	Environmental Science	30	70
=	CC-6	Bio-instrumentation and Biostatistics	30	70
Semester II	CC-7	Biochemistry	30	70
me	CC-8	Biosystematics and Evolution	30	70
Se	CC-9	Practical	30	70
	AEC-1		50	50
	CC-10	Vertebrate Immunology	30	70
≡	CC-11	Gamete and Developmental Biology	30	70
Semester III	CC-12	Vertebrate Endocrinology	30	70
٦e۶	CC-13	Animal Behaviour	30	70
Ser	CC-14	Practical	30	70
	AECC-2		50	50
Comactor	EC-1	Subject Specific Elective	30	70
Semester IV	EC-2	Subject Specific Elective (Practical)	30	70
IV	DSE or GE		30	70

### M.Sc. Chemistry (CBCS)

Serial No.	Courses	Code	Description	Credits	Max. Marks (100)
1	Core Course	MSCCHE CC-1	Inorganic Chemistry-1	5	100
2	Core Course	MSCCHE CC-2	Physical Chemistry-1	5	100
3	Core Course III	MSCCHE CC-3	Organic Chemistry-1	5	100
4	Core Course IV	MSCCHE CC-4	Practical (Physical)	5	50+50
5	AECC-1		Environmental Sustainability and Swachchchha Bharat Abhiyan Activities	3+2	50+50

Serial No.	Courses	Code	Description	Credits	Max. Marks (100)
6	Core Course V	MSCCHE CC-5	Advances in Chemistry	5	100
7	Core Course VI	MSCCHE CC-6	Inorganic Chemistry-II	5	100
8	Core Course VII	MSCCHE CC-7	Physical Chemistry-II	5	100
9	Core Course VIII	MSCCHE CC-8	Organic Chemistry-II	5	100
10	Core Course IX	MSCCHE CC-9	Practical (Organic)	5	50+50
11	AEC-1			5	50+50

Serial Courses Code Description Credits Max. Marks No. (100) 100 MSCCHE CC-10 Application of Spectroscopy 12 Core Course X MSCCHE CC-11 Bio-inorganic Chemistry 100 13 Core Course XI Environmental Chemistry and Green Chemistry Bio-organic Chemistry 100 MSCCHE CC-12 14 Core Course XII 5 100 Core Course XIII MSCCHE CC-13 15 Practical (Inorganic Chemistry) Human values and professional ethics & Gender Core Course XIV AECC-2 MSCCHE CC-14 5 50+50 16 50+50 3+2 17

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Serial No.	Courses	Code	Description	Credits	Max. Marks (100)
18	Elective Course-1	MSCCHE EC-1a	Inorganic Chemistry Special	5	100
19	Elective Course-1	MSCCHE EC-1b	Physical Chemistry Special	5	100
20	Elective Course-1	MSCCHE EC-1c	Organic Chemistry Special	5	100
21	Elective Course-2	MSCCHE EC-2a	Inorganic Chemistry Special Practical	5	50+50
22	Elective Course-2	MSCCHE EC-2b	Physical Chemistry Special Practical	5	50+50
23	Elective Course-2	MSCCHE EC-2c	Organic Chemistry Special Practical	5	50+50
24	DSE-1 or GE-1			5	100