U. P. Rajarshi Tandon Open University, Prayagraj Ordinance Governing The Bachelor of Science Degree Program In The School of Science

Programme Objective

The aim of the six (three year) semester Bachelor of Science (B.Sc.) program is to provide opportunities for higher education in science to in service, people living in rural/remote areas and belonging to disadvantaged sections of the society, and to promote scientific temper in everyday life. The program offers a platform to the learners to fulfill the eligible criteria in various scientific jobs in government and private sector.

Programme Duration (in yrs.): Minimum 3 years Maximum: 6 years **Programme Duration (in semester):** Minimum 06 semester Maximum: 12 semester

Language of SLM: English Language of Examination: Hindi/English

Programme Fee /year: As decided by the competent authority time to time.

Minimum Qualification for Admission: 10+2 (Science Group)

Assignment Work: Essential

Introduction to Bachelor of Science Programme

It is an undergraduate program leading to Bachelor of Science (B.Sc.) degree. It is mandatory for every learner to offer any combination of subjects listed below to complete his/her program for the degree. Total credits allotted against each paper of all three subjects will be 96 distributed in 06 semesters (three years) separately. A learner has to study and pass the 16 credits each from the three selected **Core Course** (subjects) in the first and second years. The learner has to choose and study one paper out of AECEG or ACEHD in first semester and AECEA in second semester of 4 credits each under **Ability Enhancement Compulsory Courses**. Under **Skill Enhancement Courses**, it is compulsory to study 16 credit papers in third, fourth, fifth and sixth semester. The learner has to choose any two groups among A, B, C, D, E, F, G and H from **Discipline Specific Elective Course** in each selected subject in fifth and sixth semester.

In this way, the learner must complete his 32 credit in the first year, 32 credit in the second year and 32 credits in the third year totaling of 96 credits.

Combinations of undergraduate science programs:

The learner has to offer any one of the following combinations:

- C1: Physics, Chemistry, Mathematics.
- C2: Physics, Mathematics, Computer Science.
- C3: Botany, Zoology, Chemistry.
- C4: Physics, Mathematics, Statistics.
- C5: Botany, Zoology, Biochemistry.
- C6: Physics, Chemistry, Statistics.
- C7: Physics, Statistics, Computer Science.
- C8: Mathematics, Statistics, Computer Science.

1. Admission

- **1.1.** Admission to B. Sc. first year will be made as per the rules prescribed by the Academic Council of the University.
- **1.2.** The eligibility condition for admission in B.Sc. Programs is that the candidate should pass the 10+2 level with science group.

2. Curriculum & Scheme of Program

- **2.1.** The six semester curriculum shall include, Self Learning, Counseling classes, practical's etc, as decided in scheme and necessary instruction issued from time to time.
- **2.2.** The subjects, distribution of credits and maximum marks for various semesters and examination shall be as per the syllabi subject to changes by recommendations of respective Board of studies/School Board.

3. Format and Course Selection criterion for B.Sc. Programme

The format of B.Sc. program is given below:

Year	First Selected Subject Core papers with	Second Selected Subject Core papers	Third Selected Subject Core papers	Ability Enhancement Compulsory Course	Skill Based Course	Discipline Specific Course	Total credit
	credit	with credit	with credit				
1st Sem.	4	4	4	4	-	-	16
2 nd Sem.	4	4	4	4	-	-	16
3 rd Sem.	4	4	4	-	4	-	16
4 th Sem.	4	4	4	-	4	-	16
5 th Sem.	-	-	-	-	4	12	16
6 th Sem.	-	-	-	-	4	12	16
Total credit	16	16	16	8	16	24	96

The format of **Skill Enhancement Courses** is given below:

				urses from 3 rd to 6 ^t	h semester	•			
S.	Combination of three courses			Se	mester an	d Course Code			
No.		3 rd sem		4 th sem		5 th sem		6 th sem	
		Course code	credit	Course code	credit	Course code	credit	Course code	credit
1.	Physics, Chemistry, Mathematics	SBSCHE-01	4	SBSPHS-02	4	SBSMM-03	4	SBSSTAT-04	4
2.	Physics, Chemistry, Statistics	SBSCHE-01	4	SBSPHS-02	4	SBSMM-03	4	SBSSTAT-04	4
3.	Physics, Mathematics, Computer Science	SBSCS-01	4	SBSPHS-02	4	SBSMM-03	4	SBSSTAT-04	4
4.	Physics, Mathematics, Statistics	SBSCS-01	4	SBSPHS-02	4	SBSMM-03	4	SBSSTAT-04	4
5.	Physics, Statistics, Computer Science	SBSCS-01	4	SBSPHS-02	4	SBSMM-03	4	SBSSTAT-04	4
6.	Mathematics, Statistics, Computer Science	SBSCS-01	4	SBSPHS-02	4	SBSMM-03	4	SBSSTAT-04	4
7.	Botany, Zoology, Chemistry	SBSCHE-01	4	SBSBY-02	4	SBSZY-03	4	SBSBCH-04	4
8.	Botany, Zoology, Biochemistry	SBSBCH-01	4	SBSBY-02	4	SBSZY-03	4	SBSBCH-04	4

The Selection criterion for **Discipline Specific Elective Course (DEC)** for 5^{th} and 6^{th} Semester is given below:

	Physics		Chemistry		Mathemati	cs	Computer	•	Statistics		Biochemist	ry	Botany		Zoology	
Subjects/ semester	(Group A)		(Group B)		(Group C)		Science (Group D)	(Group E)		(Group F)		(Group G)	(Group H)
	Paper code	cre dit	Paper code	cre dit	Paper code	cre dit	Paper code	cre dit	Paper code	cre dit	Paper code	cre dit	Paper code	cre dit	Paper code	cre dit
	DECPHS -105	2	DECCHE -105	2	DECMM -109	2	DECCS -105	2	DECSTA T -105	2	DECBCH -105	2	DECBY -105	2	DECZY- -105	2
5 th Semester	DECPHS -106	2	DECCHE -106	2	DECMM -110	2	DECCS -106	2	DECSTA T -106	2	DECBCH -106	2	DECBY -106	2	DECZY -106	2
	DECPHS- 107P	2	DECCHE- 107P	2	DECMM- 111P	2	DECCS- 107P	2	DECSTA T-107P	2	DECBCH 107P	2	DECBY 107P	2	DECZY 107P	2
	DECPHS -108	2	DECCHE -108	2	DECMM -112	2	DECCS -108	2	DECSTA T-108	2	DECBCH -108	2	DECBY -108	2	DECZY -108	2
6 th Semester	DECPHS -109	2	DECCHE -109	2	DECMM -113	2	DECCS -109	2	DECSTA T -109	2	DECBCH -109	2	DECBY -109	2	DECZY -109	2
	DECPHS- 110P	2	DECCHE- 110P	2	DECMM- 114P	2	DECCS- 110P	2	DECSTA T-110P	2	DECBCH 110P	2	DECBY 110P	2	DECZY 110P	2

4. Examination & Evaluation

A. For each subject there shall be one written Terminal Examination. The evaluation of every paper shall be in two parts that is 30% internal through assignments and 70% external through terminal exams.

(a)	Theory Subjects	Max. Mark s
	Terminal Examination	70
	Assignment	30
	Total	100
(b)	Practical subjects:	Max. Marks

Terminal Practical Examination 100

Marks of Terminal Practical Examination shall be awarded as per following scheme:

i.	Write up /theory work	30
ii.	Viva-voce	30
iii.	Execution/Performance/Demonstration	20
iv.	Lab Record	20

5. Criteria for passing a program

The student shall be awarded First Division on securing 60% marks or more, Second division on Securing 48% marks or more, Third division on securing 36% marks or more and result is considered as Incomplete if securing less than 36% marks.

6. Re-registration: Only for one year just after 6 years (or 12 semester) of maximum duration is completed.

7. Interpretation

If any question arises as to the interpretation of this Regulation, the same shall be decided by the Academic Council. The Academic Council shall have the power to issue clarification to remove any doubt which may arise in regard to implementation of this Regulation.

C-1: Combination (Physics, Chemistry, Mathematics)

Semester	Course Code		Title of course	Credits			
Bemester	Course code		Compulsory Core Course	Credits			
	UGPHS -101	Vector, Med	chanics and General Physics	2			
	UGCHE-101		hemistry I (Basic Inorganic Chemistry)	2			
	UGMM-101	Differential		2			
I	UGMM-102	Analytical (Geometry	2			
_	UGPHS -101P	Practical W	ork based on UGPHS -101	2			
	YVGGYTT 101D		11 Vagarra (a)				
	UGCHE-101P	Practical W	ork based on UGCHE-101	2			
	AECEG	Ability Enh	Ability Enhancement Course ancement Course in English	4			
	OR	Ability Emi	OR	OR			
	AECHD	Ability Enh	ancement Course in Hindi	4			
			Total Credit (1 st Semester)	16			
		T	Compulsory Core Course				
	UGPHS -102		waves and electrical circuits	2			
	UGCHE-102		emistry I (Basic Organic Chemistry)	2			
	UGMM-103	Integral Cal	culus	2			
	UGMM-104	Differential	Equation	2			
II	UGPHS -102P	Practical W	ork based on UGPHS -102	2			
	UGCHE-102P	Practical W	ork based on UGCHE-102	2			
			Ability Enhancement Course				
	AECEA	Ability Enh	ancement Course in Environment Awareness	4			
		<u>_</u>	Total Credit (2 nd Semester)	16			
			Compulsory Core Course				
	UGPHS -103	Electromag	netism	2			
	UGCHE-103		emistry I (Basic Physical Chemistry)	2			
III	UGMM-105		I (Statics and Dynamics)	2 2			
	UGMM-106		Mechanics-II (Dynamics and Hydrodynamics) Practical Work based on UGPHS -103				
	UGPHS -103P UGCHE-103P		ork based on UGPHS -103 ork based on UGCHE-103	2 2			
	UGCHE-103F	Skill Enhancement Course					
	SBSCHE-01	Organic Ch	emistry II (Advance Organic Chemistry)	4			
			Total Credit (3 rd Semester)	16			
			Compulsory Core Course				
	UGPHS -104	Analog and	Digital Electronics	2			
	UGCHE-104		hemistry II (Advance Inorganic Chemistry)	2			
	UGMM-107	Linear Alge	bra	2			
IV	UGMM-108		function of several variable and Vector Calculus	2			
	UGPHS -104P		ork based on UGPHS -104	2			
	UGCHE-104P	Practical W	ork based on UGCHE-104 Skill Enhancement Course	2			
	SBSPHS-02	Modern phy		4			
	SDSI IIS 02	Wiodein phy	Total Credit (4 th Semester)	16			
			Skill Enhancement Course				
	SBSMM-03	Elementary	Analysis	4			
		Discipline Cent	ric Elective Course (Chose any two group from A, B and C)				
V		DCEPHS -105	Optics	2			
	Group-A	DCEPHS -106	Thermal Physics	2			
		DCEPHS-107P	Practical Work based on DCEPHS -105 and DCEPHS -106	2			
	Group-B	DCECHE -105 DCECHE -106	Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry)	2 2			
	Group-D	DCECHE-100 DCECHE-107P	Practical Work based on DCECHE -105 and DCECHE -106	2			
		DCEMM -109	Abstract Algebra	2			
	Group-C	DCEMM -110	Number Theory	2			
		DCEMM-111(P)	Viva Voce	2			
			Total Credit (5 th Semester)	16			
			Skill Enhancement Course				
	SBSSTAT-04	Numerical I	Methods & Basic Computer Knowledge	4			
		Discipline Cer	ntric Elective Course (Chose any two group as per Sem. V)				
		DCEPHS -108	Quantum mechanics and spectroscopy	2			
	Group-A	DCEPHS -109	Solid State Physics and Advanced Electronics	2			
VI		DCECHE 109	Practical Work based on DCEPHS-108 and DCEPHS-109	2			
'1	Group-B	DCECHE -108 DCECHE -109	Organic Chemistry III (Selected Topics In Organic Chemistry) Physical Chemistry III (Selected Topics In Physical Chemistry)	2 2			
	Group-D	DCECHE-109 DCECHE-110P	Practical Work based on DCECHE -108 and DCECHE -109	2 2			
		DCEMM -112	Advance Analysis	2			
	Group-C	DCEMM -113	Function of Complex Variable	2			
		DCEMM-114(P)	Viva Voce	2			
			Total Credit (6 th Semester)	16			
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C-2: Combination (Physics, Chemistry, Statistics)

	·	ľ	Title of course	Credits		
Semester	Course Code			Credits		
	UGPHS -101	Vector, Me		2		
	UGCHE-101			2		
	UGSTAT-101	Statistical N	Methods	2		
	UGPHS -101P	Practical W	ork based on UGPHS -101	2		
I				2		
				2		
	UGS1A1-101F	Fractical W				
	AFGEG	A1222 E 1	•			
UGSTAT-101 Statistical Methods UGPHS-101P Practical Work based on UGPHS-101 UGCHE-101P Practical Work based on UGCHE-101 UGSTAT-101P Practical Work based on UGCHE-101 Ability Enhancement Course AECEG Ability Enhancement Course in English OR AECHD Ability Enhancement Course in English OR AECHD Ability Enhancement Course in English OR AECHD Ability Enhancement Course in English UGCHE-102 Oscillation, waves and electrical circuits UGCHE-102 Organic Chemistry (Basic Organic Chemistry) UGSTAT-102 Probability, Distribution and Statistical Inference UGPHS-102 Practical Work based on UGCHE-102 UGSTAT-102P Practical Work based on UGCHE-102 UGSTAT-102P Practical Work based on UGSTAT-102 AECEA Ability Enhancement Course in Environment Awareness Total Credit (2 rd S		4 OR				
		Ability Enh		4		
			Total Credit (1st Semester)	16		
	UGPHS -102	Oscillation.		2		
				2		
	UGSTAT-102	_	-	2		
	UGPHS -102P	Practical W	ork based on UGPHS -102	2		
п				2		
				2		
	UGS1A1-102P	Practical W				
	A EGE A	LALIE D.	· ·	4		
				16		
	LIGPHS -103	Flectromag		2		
				2		
III	UGSTAT-103	Sampling T	heory and Design of Experiments	2 2		
	Skill Enhancement Course					
	SBSCHE-01	Organic Ch	emistry II (Advance Organic Chemistry)	4		
			Total Credit (3 rd Semester)	16		
			Compulsory Core Course			
			Digital Electronics	2		
	UGCHE-104	Inorganic C	Digital Electronics hemistry II (Advance Inorganic Chemistry)	2		
N/	UGCHE-104 UGSTAT-104	Inorganic C Applied Sta	Digital Electronics 'hemistry II (Advance Inorganic Chemistry) tistics	2 2		
IV	UGCHE-104 UGSTAT-104 UGPHS -104P	Inorganic C Applied Sta Practical W	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104	2		
IV	UGCHE-104 UGSTAT-104 UGPHS -104P UGCHE-104P	Inorganic C Applied Sta Practical W Practical W	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104	2 2 2		
IV	UGCHE-104 UGSTAT-104 UGPHS -104P UGCHE-104P UGSTAT-104P	Inorganic C Applied Sta Practical W Practical W Practical W	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course	2 2 2 2 2 2		
IV	UGCHE-104 UGSTAT-104 UGPHS -104P UGCHE-104P UGSTAT-104P	Inorganic C Applied Sta Practical W Practical W Practical W	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course	2 2 2 2		
IV	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02	Inorganic C Applied Sta Practical W Practical W Practical W Modern phy	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course (sics Total Credit (4 th Semester)	2 2 2 2 2 2 2 4 16		
IV	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02	Inorganic C Applied Sta Practical W Practical W Practical W Modern phy	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course (sics Total Credit (4 th Semester) Skill Enhancement Course Analysis	2 2 2 2 2 2 2		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02	Inorganic C Applied Sta Practical W Practical W Practical W Modern phy Elementary Discipline Cent	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course vsics Total Credit (4 th Semester) Skill Enhancement Course Analysis cric Elective Course (Chose any two group from A, B and E)	2 2 2 2 2 2 2 4 16		
	UGCHE-104 UGSTAT-104 UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03	Inorganic C Applied Sta Practical W Practical W Practical W Modern phy Elementary Discipline Cent	Digital Electronics Chemistry II (Advance Inorganic Chemistry) Itistics Ork based on UGPHS -104 Ork based on UGCHE-104 Ork based on UGSTAT -104 Skill Enhancement Course (Sics Total Credit (4 th Semester) Skill Enhancement Course Analysis Cric Elective Course (Chose any two group from A, B and E) Optics	2 2 2 2 2 2 2 4 16		
	UGCHE-104 UGSTAT-104 UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course (Sics Total Credit (4 th Semester) Skill Enhancement Course Analysis cric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106	2 2 2 2 2 2 4 16		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course Skill Enhancement Course Skill Enhancement Course Analysis cric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry)	2 2 2 2 2 2 4 16 4		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course //sics Total Credit (4 th Semester) Skill Enhancement Course Analysis cric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry)	2 2 2 2 2 2 4 16 4		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -106 DCECHE -106 DCECHE-107P DCESTAT -105	Digital Electronics Chemistry II (Advance Inorganic Chemistry) Itistics Ork based on UGPHS -104 Ork based on UGCHE-104 Ork based on UGSTAT -104 Skill Enhancement Course Vsics Total Credit (4 th Semester) Skill Enhancement Course Analysis Cric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -106 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106	Digital Electronics Itemistry II (Advance Inorganic Chemistry) Itistics Ork based on UGPHS -104 Ork based on UGCHE-104 Ork based on UGSTAT -104 Skill Enhancement Course Visics Total Credit (4 th Semester) Skill Enhancement Course Analysis Tric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -106 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106	Digital Electronics Chemistry II (Advance Inorganic Chemistry) Itistics Ork based on UGPHS -104 Ork based on UGCHE-104 Ork based on UGSTAT -104 Skill Enhancement Course Vsics Total Credit (4 th Semester) Skill Enhancement Course Analysis Cric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -106 DCEPHS -106 DCECHE -105 DCECHE -106 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106 DCESTAT -107P	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course //sics Total Credit (4 th Semester) Skill Enhancement Course Analysis ric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -106	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106 DCESTAT -106	Digital Electronics Chemistry II (Advance Inorganic Chemistry) Citistics Ork based on UGPHS -104 Ork based on UGCHE-104 Ork based on UGSTAT -104 Skill Enhancement Course Visics Total Credit (4 th Semester) Skill Enhancement Course Analysis Cric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -106 Total Credit (5 th Semester)	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B Group-E	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106 DCESTAT -107P Numerical I	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course Skill Enhancement Course Analysis ric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5 th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge Intric Elective Course (Chose any two group as per Sem. V)	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4 4		
	UGCHE-104 UGSTAT-104 UGPHS -104P UGCHE-104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B SBSSTAT-04	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -105 DCESTAT -107P Numerical I Discipline Cent DCEPHS -108	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course Skill Enhancement Course Skill Enhancement Course Analysis Tric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5 th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge Intric Elective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4		
v	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B Group-E	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106 DCESTAT -107P Numerical I	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course (Sics Total Credit (4 th Semester) Skill Enhancement Course Analysis Tric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5 th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge Intric Elective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4 4		
	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B Group-E SBSSTAT-04	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106 DCESTAT -106 DCESTAT -106 DCESTAT -107P Numerical I Discipline Cent DCEPHS -108 DCEPHS -109 DCEPHS -109 DCEPHS -110P DCECHE -108	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course (Sics Total Credit (4th Semester) Skill Enhancement Course Analysis Tric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge Intric Elective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 Organic Chemistry III (Selected Topics In Organic Chemistry)	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
v	UGCHE-104 UGSTAT-104 UGPHS -104P UGCHE-104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B SBSSTAT-04	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -106 DCEPHS -106 DCECHE -106 DCECHE -106 DCECHE -107P DCESTAT -105 DCESTAT -106 DCESTAT -107P Numerical I Discipline Cent DCEPHS -108 DCEPHS -109 DCEPHS -109 DCEPHS -109 DCEPHS -109 DCECHE -108 DCECHE -109	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course //sics Total Credit (4th Semester) Skill Enhancement Course Analysis ric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge Intric Elective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 Organic Chemistry III (Selected Topics In Organic Chemistry) Physical Chemistry III (Selected Topics In Organic Chemistry)	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
v	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B Group-E SBSSTAT-04	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106 DCECHE-107P DCESTAT -105 DCESTAT -106 DCESTAT -106 DCESTAT -106 DCESTAT -107P Numerical I Discipline Cent DCEPHS -108 DCEPHS -109 DCEPHS -109 DCEPHS -110P DCECHE -108	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course (Sics Total Credit (4th Semester) Skill Enhancement Course Analysis Tric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge Intric Elective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 Organic Chemistry III (Selected Topics In Organic Chemistry)	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4		
v	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B Group-E SBSSTAT-04	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -106 DCECHE-107P DCESTAT -106 DCESTAT -106 DCESTAT -109 DCEPHS -109 DCEPHS -109 DCEPHS -109 DCECHE -109 DCECHE -109 DCECHE -109 DCECHE -109 DCECHE-110P DCESTAT-108 DCESTAT -109	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course //sics Total Credit (4 th Semester) Skill Enhancement Course Analysis ric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5 th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge atric Elective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 Organic Chemistry III (Selected Topics In Organic Chemistry) Physical Chemistry III (Selected Topics In Physical Chemistry) Practical Work based on DCECHE -108 and DCECHE -109 Official Statistics Operation Research	2 2 2 2 2 4 16 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
v	UGCHE-104 UGSTAT-104P UGPHS -104P UGCHE-104P UGSTAT-104P SBSPHS-02 SBSMM-03 Group-A Group-B SBSSTAT-04 Group-B	Inorganic C Applied Sta Practical W Practical W Practical W Practical W Practical W Practical W Modern phy Elementary Discipline Cent DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECHE -105 DCECHE -105 DCECHE -105 DCESTAT -106 DCESTAT -106 DCESTAT -107P Numerical I Discipline Cent DCEPHS -109 DCEPHS -109 DCEPHS -109 DCECHE -108 DCECHE -109 DCECHE -109 DCECHE -110P DCECHE-110P DCESTAT-108	Digital Electronics Chemistry II (Advance Inorganic Chemistry) tistics ork based on UGPHS -104 ork based on UGCHE-104 ork based on UGSTAT -104 Skill Enhancement Course //sics Total Credit (4th Semester) Skill Enhancement Course Analysis ric Elective Course (Chose any two group from A, B and E) Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Physical Chemistry II (Advance Physical Chemistry) Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) Practical Work based on DCECHE -105 and DCECHE -106 Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106 Total Credit (5th Semester) Skill Enhancement Course Methods & Basic Computer Knowledge Intric Elective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 Organic Chemistry III (Selected Topics In Organic Chemistry) Physical Chemistry III (Selected Topics In Physical Chemistry) Practical Work based on DCECHE -108 and DCECHE -109 Official Statistics	2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		

Semester	Combination (Phys	ics, Mathematic	S, Computer Science) Title of course	Credits				
			Compulsory Core Course					
	UGPHS -101	Vector, Mechanics	and General Physics	2				
	UGCS-101	Statistical Methods		2				
	UGMM-101	Differential Calcul	us	2				
	UGMM-102	Analytical Geomet	rv	2				
I		-						
	UGPHS -101P		sed on UGPHS -101	2				
	UGCS-101P	Practical Work bas	sed on UGCS -101	2				
			Ability Enhancement Course					
	AECEG	Ability Enhanceme	ent Course in English	4				
	OR AECHD	Ability Enhanceme	OR ent Course in Hindi	OR 4				
	ALCHD	Ability Emianceme	Total Credit (1st Semester)	16				
			Compulsory Core Course					
	UGPHS -102	Oscillation, waves	and electrical circuits	2				
	UGCS-102	Probability, Distrib	oution and Statistical Inference	2				
	UGMM-103	Integral Calculus		2				
	UGMM-104	Differential Equati	on	2				
II	UGPHS -102P	=	sed on UGPHS -102	2				
	UGCS-102P	Practical Work bas		2				
	UGCS-102P	Practical Work bas						
		T	Ability Enhancement Course					
	AECEA	Ability Enhanceme	ent Course in Environment Awareness	4				
			Total Credit (2 nd Semester)	16				
		1	Compulsory Core Course					
	UGPHS -103	Electromagnetism		2 2				
Ш	UGCS-103 UGMM-105	Data Structures Mechanics-I (Stational Control of the Control of t	cs and Dynamics)	2				
	UGMM-106		Mechanics-II (Dynamics and Hydrodynamics)					
	UGPHS -103P Practical Work based on UGPHS -103							
	UGCS-103P Practical Work based on UGCS -103 Skill Enhancement Course							
	SBSCS-01	Discrete Mathemat		4				
	3B3C3-01	Discrete Mathemat	Total Credit (3 rd Semester)	16				
			Compulsory Core Course					
	UGPHS -104	Analog and Digital		2				
	UGCS-104		tabase Management System	2				
	UGMM-107	Linear Algebra		2				
IV	UGMM-108		on of several variable and Vector Calculus	2				
	UGPHS -104P UGCS-104P	Practical Work bas	sed on UGPHS -104	2 2				
	0005-1041	Tractical Work bas	Skill Enhancement Course					
	SBSPHS-02	Modern physics		4				
			Total Credit (4 th Semester)	16				
	SBSMM-03	Elementary Analys	Skill Enhancement Course	4				
			ctive Course (Chose any two group from A, D and C)	<u></u>				
		Discipinic Centric Ele						
\mathbf{V}		DCEPHS -105	Optics	2				
V	Group-A	DCEPHS -105 DCEPHS -106	Thermal Physics	2 2				
V		DCEPHS -105 DCEPHS -106 DCEPHS-107P	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106	2 2				
V	Group-A	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network	2 2 2				
V		DCEPHS -105 DCEPHS -106 DCEPHS-107P	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106	2 2 2 2 2 2				
V	Group-A Group-D	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra	2 2 2 2 2 2				
V	Group-A	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory	2 2 2 2 2 2 2 2				
V	Group-A Group-D	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce	2 2 2 2 2 2				
V	Group-A Group-D	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P)	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory	2 2 2 2 2 2 2 2 2 2 2				
V	Group-A Group-D Group-C	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P)	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester)	2 2 2 2 2 2 2 2 2 2 2 2 6				
V	Group-A Group-D	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Snhancement Course Is & Basic Computer Knowledge	2 2 2 2 2 2 2 2 2 2 2				
V	Group-A Group-D Group-C	DCEPHS -105 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Chhancement Course Is & Basic Computer Knowledge Rective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy	2 2 2 2 2 2 2 2 2 2 4				
V	Group-A Group-D Group-C	DCEPHS -105 DCEPHS -106 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E Numerical Method Discipline Centric E DCEPHS -108 DCEPHS -109	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Chancement Course Is & Basic Computer Knowledge Rective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics	2 2 2 2 2 2 2 2 2 4				
	Group-D Group-C SBSSTAT-04	DCEPHS -105 DCEPHS -106 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E DCEPHS -108 DCEPHS -108 DCEPHS -109 DCEPHS -109	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Chhancement Course Is & Basic Computer Knowledge Rective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109	2 2 2 2 2 2 2 2 2 2 4				
V	Group-A Group-C SBSSTAT-04 Group-A	DCEPHS -105 DCEPHS -106 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E Numerical Method Discipline Centric E DCEPHS -108 DCEPHS -109 DCEPHS -109 DCEPHS-110P DCECS -108	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Chhancement Course Is & Basic Computer Knowledge Rective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 C*+ and Object Oriented Programming	2 2 2 2 2 2 2 2 2 16				
	Group-D Group-C SBSSTAT-04	DCEPHS -105 DCEPHS -106 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E DCEPHS -108 DCEPHS -108 DCEPHS -109 DCEPHS -109	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Chancement Course Is & Basic Computer Knowledge Rective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 C** and Object Oriented Programming Software Engineering Practical Work based on DCECS -108	2 2 2 2 2 2 2 2 2 4 4				
	Group-A Group-C SBSSTAT-04 Group-A Group-D	DCEPHS -105 DCEPHS -106 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS -107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E Numerical Method Discipline Centric E DCEPHS -108 DCEPHS -109 DCEPHS-110P DCECS -108 DCECS -109 DCECS -110P DCECS -110P DCEMM -112	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Chancement Course S & Basic Computer Knowledge Sective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 C + and Object Oriented Programming Software Engineering Practical Work based on DCECS -108 Advance Analysis	2 2 2 2 2 2 2 2 2 16				
	Group-A Group-C SBSSTAT-04 Group-A	DCEPHS -105 DCEPHS -106 DCEPHS -106 DCEPHS-107P DCECS -105 DCECS -106 DCECS-107P DCEMM -109 DCEMM -110 DCEMM-111(P) Skill E Numerical Method Discipline Centric E DCEPHS -108 DCEPHS -109 DCEPHS -109 DCECS -108 DCECS -109 DCECS -110P	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106 Computer Network Operating System Practical Work based on DCECS -106 Abstract Algebra Number Theory Viva Voce Total Credit (5 th Semester) Chancement Course Is & Basic Computer Knowledge Rective Course (Chose any two group as per Sem. V) Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109 C** and Object Oriented Programming Software Engineering Practical Work based on DCECS -108	2 2 2 2 2 2 2 2 2 16				

C-4: Combination (Physics, Mathematics, Statistics)

		hysics, Mather	matics, Statistics)				
Semester	Course Code		Title of course	Credits			
		T	Compulsory Core Course				
	UGPHS -101 UGSTAT-101	Vector, Mechanics Statistical Methods	and General Physics	2 2			
	UGMM-101	Differential Calcul		2			
I	UGMM-102	Analytical Geometr	ry	2			
1	UGPHS -101P	Practical Work bas	ed on UGPHS -101	2			
	UGSTAT-101P	Practical Work bas	ed on UGSTAT -101	2			
			Ability Enhancement Course				
	AECEG	Ability Enhanceme	nt Course in English	4			
	OR		OR	OR			
	AECHD	Ability Enhanceme		4			
			Total Credit (1 st Semester)	16			
	LICDIIC 102	Ossillation ways	Compulsory Core Course and electrical circuits	2			
	UGPHS -102 UGSTAT -102	,	ution and Statistical Inference	2			
		-	ution and Statistical inference				
	UGMM-103	Integral Calculus		2			
	UGMM-104	Differential Equation		2			
II	UGPHS -102P	Practical Work bas	ed on UGPHS -102	2			
	UGSTAT -102P	Practical Work bas	ed on UGSTAT -102	2			
			Ability Enhancement Course				
	AECEA	Ability Enhanceme	nt Course in Environment Awareness	4			
			Total Credit (2 nd Semester)	16			
			Compulsory Core Course				
	UGPHS -103	Electromagnetism	Compulsory Core Course	2			
	UGSTAT -103		nd Design of Experiments	2			
III	UGMM-105	Mechanics-I (Statics and Dynamics)					
	UGMM-106 UGPHS -103P	Mechanics-II (Dyn Practical Work bas	amics and Hydrodynamics)	2			
	UGSTAT -103P		ed on UGSTAT -103	2 2			
	0.001111 1001	Tractical World Sus	Skill Enhancement Course				
	SBSCS -01	Discrete Mathemat		4			
			Total Credit (3 rd Semester)	16			
			Compulsory Core Course				
	UGPHS -104	Analog and Digital	Electronics	2			
	UGSTAT -104	Applied Statistics		2			
***	UGMM-107 UGMM-108	Linear Algebra	on of several variable and Vector Calculus	2 2			
IV	UGPHS -104P	Practical Work bas		2			
	UGSTAT -104P		ed on UGSTAT -104	2			
	an anyya oa		Skill Enhancement Course				
	SBSPHS-02	Modern physics	Total Credit (4 th Semester)	4 16			
			Skill Enhancement Course	10			
	SBSMM-03	Elementary Analys		4			
v		Discipline Cent	ric Elective Course (Chose any two group from A, E and C)				
٧	G	DCEPHS -105	Optics The second Physician	2			
	Group-A	DCEPHS -106 DCEPHS-107P	Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106	2 2			
		DCESTAT -105	Advance Statistical Inference	2			
	Group-E	DCESTAT -106	Basic Knowledge of Statistical Softwares	2 2			
		DCESTAT-107P	Practical Work based on DCESTAT -105 and DCESTAT -106	2			
	Group-C	DCEMM -109 DCEMM -110	Abstract Algebra Number Theory	2 2			
	Group C	DCEMM-111(P)	Viva Voce	2			
			Total Credit (5 th Semester)	16			
			Skill Enhancement Course				
	SBSSTAT-04	Numerical Methods	s & Basic Computer Knowledge	4			
			ntric Elective Course (Chose any two group as per Sem. V)				
		DCEPHS -108	Quantum mechanics and spectroscopy	2			
	Group-A	DCEPHS -109 DCEPHS-110P	Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109	2 2			
VI		DCESTAT -108	Official Statistics	2			
	Group-D	DCESTAT -109	Operation Research	2			
		DCESTAT-110P	Practical Work based on DCESTAT -108 and DCESTAT -109	2			
		1 13/ 11/3 /3 / 11/3	Advance Analysis	2			
	Group-C	DCEMM -112 DCEMM -113					
	Group-C	DCEMM -112 DCEMM -113 DCEMM-114(P)	Function of Complex Variable Viva Voce Total Credit (6 th Semester)	2 2			

C-5: Combination (Physics, Statistics, Computer Science)

	Combination (Physics, Statistics, Computer Science)						
Semester	Course Code		Title of course	Credits			
	MODITO 101		Compulsory Core Course				
	UGPHS -101 UGCS-101		hanics and General Physics andamental & PC Software	2			
	UGSTAT-101	Statistical M		2			
I	UGPHS -101P		rk based on UGPHS -101	2			
•	UGCS-101P	Practical Wo	rk based on UGCS -101	2			
	UGSTAT-101P	Practical Wo	rk based on UGSTAT -101	2			
		<u> </u>	Ability Enhancement Course				
	AECEG	Ability Enha	ncement Course in English	4			
	OR	A1 '11' F 1	OR	OR			
	AECHD	Ability Enna	ncement Course in Hindi Total Credit (1st Semester)	4 16			
			Compulsory Core Course				
	UGPHS -102	Oscillation, v	waves and electrical circuits	2			
	UGCS-102	C Programm	ing	2			
	UGSTAT-102	Probability, 1	Distribution and Statistical Inference	2			
	UGPHS -102P		ork based on UGPHS -102	2			
II	UGCS-102P		rk based on UGCS -102	2			
	UGSTAT-102P						
	UGS1A1-102P	Practical Wo	rk based on UGSTAT -102	2			
		Ability Enhancement Course Ability Enhancement Course in Environment Awareness					
	AECEA						
			Total Credit (2 nd Semester)	16			
· <u> </u>	***********		Compulsory Core Course	2			
	UGPHS -103 UGCS-103		Electromagnetism				
III	UGSTAT-103		Data Structures Sampling Theory and Design of Experiments				
	UGPHS -103P	Practical Wo	Practical Work based on UGPHS -103				
	UGCS-103P		rk based on UGCS -103	2			
	UGSTAT-103P	Practical Wo	rk based on UGSTAT -103 Skill Enhancement Course	2			
	SBSCS-01	Discrete Mat		4			
			Total Credit (3 rd Semester)	16			
			·	10			
	Compulsory Core Course						
	UGPHS -104 UGCS-104		Digital Electronics	2			
	UGSTAT-104		Introduction to Database Management System Applied Statistics				
IV	UGPHS -104P		Practical Work based on UGPHS -104				
	UGCS-104P		Practical Work based on UGCS -104				
	UGSTAT-104P	Practical Wo	Practical Work based on UGSTAT -104 Skill Enhancement Course				
	SBSPHS-02	Modern phys		4			
		, , ,	Total Credit (4 th Semester)	16			
	CDCMM 02	T:1	Skill Enhancement Course	A			
	SBSMM-03	Elementary A Discipline Centr	Analysis cic Elective Course (Chose any two group from A, B and E)	4			
V		DCEPHS -105	Optics	2			
	Group-A	DCEPHS -106	Thermal Physics	2			
		DCEPHS-107P	Practical Work based on DCEPHS -105 and DCEPHS -106	2			
	Group-D	DCECS -105 DCECS -106	Computer Network Operating System	2 2			
	Group-D	DCECS-100 DCECS-107P	Practical Work based on 106	2			
	~ -	DCESTAT -105	Advance Statistical Inference	2			
	Group-E	DCESTAT-106 DCESTAT-107P	Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106	2 2			
		DCLS1A1-10/F	Total Credit (5 th Semester)	16			
			Skill Enhancement Course				
	SBSSTAT-04		fethods & Basic Computer Knowledge	4			
		Discipline Cen	tric Elective Course (Chose any two group as per Sem. V)				
		DCEPHS -108	Quantum mechanics and spectroscopy	2			
	Group-A	DCEPHS -109	Solid State Physics and Advanced Electronics	2			
VI		DCEPHS-110P DCECS -108	Practical Work based on DCEPHS-108 and DCEPHS-109 C ⁺⁺ and Object Oriented Programming	2 2			
	Group-D	DCECS -108 DCECS -109	Software Engineering	2			
	•	DCECS-110P	Practical Work based on 108	2			
	1	DCESTAT -108	Official Statistics	2			
	C -		On anti- n Danamat				
	Group-E	DCESTAT -109 DCESTAT-110P	Operation Research Practical Work based on DCESTAT -108 and DCESTAT -109	2 2			

C-6: Combination (Mathematics, Statistics, Computer Science)

			Statistics, Computer Science)				
Semester	Course Cod	e	Title of course	Credits			
			Compulsory Core Course				
	UGSTAT -10 UGCS-101		ll Methods or Fundamental & PC Software	2 2			
		_					
	UGMM-101		ial Calculus	4			
I	UGMM-102	2 Analytica	al Geometry				
1	UGSTAT -10	1P Practical	Practical Work based on UGSTAT -101				
	UGCS-101F	Practical	Practical Work based on UGCS -101				
			Ability Enhancement Course				
	AECEG	Ability E	Inhancement Course in English	4			
	OR	-	OR	OR			
	AECHD	Ability E	Inhancement Course in Hindi Total Credit (1st Semester)	4 16			
			Compulsory Core Course	10			
	UGSTAT -10)2 Probabili	ty, Distribution and Statistical Inference	2			
	UGCS-102	C Progra	mming	2			
	UGMM-103	Integral C	Calculus	2			
	UGMM-104	l Different	ial Equation	2			
II	UGSTAT -10		Work based on UGSTAT -102	2			
	UGCS-102F		Work based on UGCS -102	2			
	AECEA	Ability E	Ability Enhancement Course Inhancement Course in Environment Awareness	4			
			Total Credit (2 nd Semester)	16			
			Compulsory Core Course				
	UGSTAT -10		g Theory and Design of Experiments	2			
Ш	UGCS-103 UGMM-105		ictures cs-I (Statics and Dynamics)	2 2			
	UGMM-106		cs-I (Dynamics and Hydrodynamics)	2			
	UGSTAT -10	3P Practical	Work based on UGSTAT -103	2			
	UGCS-103F	Practical Practical	Work based on UGCS -103	2			
	SBSCS-01	Discrete	Skill Enhancement Course Mathematics	4			
	SBSCS 01	Discrete	Total Credit (3 rd Semester)	16			
			Compulsory Core Course				
	UGSTAT -10 UGCS-104		Statistics ion to Database Management System	2 2			
	UGMM-107		Linear Algebra				
IV	UGMM-108	3 Calculus	Calculus of function of several variable and Vector Calculus				
11	UGSTAT -104	4P Practical	Work based on UGSTAT -104	2			
	UGCS-104F	Practical	Work based on UGCS -104 Skill Enhancement Course	2			
	SBSPHS-02	Modern p		4			
			Total Credit (4 th Semester)	16			
	SBSMM-03	Elementa	Skill Enhancement Course ary Analysis	4			
***			entric Elective Course (Chose any two group from E, D and C)				
V		DCESTAT -105	Advance Statistical Inference	2			
	Group-E	DCESTAT 107B	Basic Knowledge of Statistical Softwares	2			
		DCESTAT-107P DCECS -105	Practical Work based on DCESTAT -105 and DCESTAT -106 Computer Network	2 2			
	Group-D	DCECS -106	Operating System	2			
		DCECS -107P	Practical Work based on 106	2			
	Group-C	DCEMM -109 DCEMM -110	Abstract Algebra Number Theory	2 2			
	Group-C	DCEMM-111(P)	Viva Voce	2			
			Total Credit (5 th Semester)	16			
			Skill Enhancement Course				
	SBSSTAT-04		al Methods & Basic Computer Knowledge	4			
			Centric Elective Course (Chose any two group as per Sem. V) Official Statistics	2			
	Group-E	DCESTAT -108 DCESTAT -109	Official Statistics Operation Research	2 2			
	Group-12	DCESTAT-110P	Practical Work based on DCESTAT -108 and DCESTAT -109	2			
VI		DCECS-108	C ⁺⁺ and Object Oriented Programming	2			
	Group-D	DCECS -109 DCECS -110P	Software Engineering Practical Work based on 108	2 2			
		DCECS -110P DCEMM -112	Advance Analysis	2			
	Group-C	DCEMM -113	Function of Complex Variable	2			
		DCEMM-114(P)	Viva Voce Total Credit (6 th Semester)	2 16			
	1		Total Credit (o Seiflester)	10			

C-7: Combination (Botany, Zoology, Chemistry)

	Combination (Botany, Zoology, Chemistry)						
Semester	Course Code	.e	Title of course	Credits			
			Compulsory Core Course				
	UGBY -101		rtology and Genetic	2			
	UGCHE-101	I Inc	organic Chemistry I (Basic Inorganic Chemistry)	2			
	UGZY-101	Ar	nimal Physiology	2			
	UGBY -1011	P Pr	actical Work based on UGBY -101	2			
I	UGCHE-101		actical Work based on UGCHE-101	2			
	UGZY-101F	Pra	actical Work Based on UGZY -101	2			
			Ability Enhancement Course				
	AECEG	At	pility Enhancement Course in English	4			
	OR AECHD	A1	OR	OR			
	AECHD	At	bility Enhancement Course in Hindi Total Credit (1st Semester)	4 16			
	 			10			
	UGBY -102) PI	Compulsory Core Course ant Physiology	2			
	UGCHE-102		ganic Chemistry I (Basic Organic Chemistry)	2			
	UGZY-102		versity of Animal life	2			
	UGBY -1021	P Pr	actical Work based on UGBY -102	2			
II	UGCHE-102	P Pr	actical Work based on UGCHE-102	2			
	UGZY-102F	Pr	actical Work Based on UGZY -102	2			
	Ability Enhancement Course						
	ABCEA Ability Enhancement Course in Environment Awareness						
	AECEA	At	•	4			
			Total Credit (2 nd Semester)	16			
			Compulsory Core Course				
	UGBY -103		ant Diversity-I	2			
Ш	UGCHE-103		ysical Chemistry I (Basic Physical Chemistry)	2 2			
111			Genetic and Cell Biology Practical Work based on UGBY -103				
			actical Work based on UGCHE-103	2 2			
	UGZY-103F		actical Work Based on UGZY -103	2			
	Skill Enhancement Course						
	SBSCHE-01 Organic Chemistry II (Advance Organic Chemistry)						
			Total Credit (3 rd Semester)	16			
			Compulsory Core Course				
	HCDV 101	(D)					
	UGBY -104 UGCHE-104		ant Diversity-II organic Chemistry II (Advance Inorganic Chemistry)	2 2			
	UGZY-104		Hemichordata and Chordata				
IV	UGBY -1041		Practical Work based on UGBY -104				
	UGCHE-104	P Pra	actical Work based on UGCHE-104	2 2			
	UGZY-104F	Pr:	actical Work Based on UGZY -104	2			
	CDCDV 02	- F.	Skill Enhancement Course	4			
	SBSBY-02	EC	ology Total Credit (4 th Semester)	4			
	+		Total Citcuit (4 Schicster)				
				16			
	SBSZY03	Ec	Skill Enhancement Course onomic zoology and environmental biology	4			
	SBSZY03		Skill Enhancement Course				
v		Discipl DCEBY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis	4 2			
V	SBSZY03 Group-G	Discipl DCEBY -1 DCEBY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology	2 2			
v		Discipl DCEBY -1 DCEBY -1 DCEBY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106	2 2 2 2			
V	Group-G	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE -	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry)	2 2 2 2 2			
v		Discipl DCEBY -1 DCEBY -1 DCEBY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry)	2 2 2 2 2			
v	Group-G Group-B	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE- DCECY-10	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 105 Animal distribution and ecology	2 2 2 2 2 2 2 2 2 2			
v	Group-G	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE- DCEZY-10 DCEZY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 05 Animal distribution and ecology 06 Taxonomy and Evolution	2 2 2 2 2 2 2 2 2 2 2 2 2			
v	Group-G Group-B	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE- DCECY-10	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 1106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 1107P Practical Work based on DCECHE -105 and DCECHE -106 115 Animal distribution and ecology 116 Taxonomy and Evolution 117 Practical Work based on DCEZY -105 and DCEZY -106	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
v	Group-G Group-B	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE- DCEZY-10 DCEZY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 05 Animal distribution and ecology 06 Taxonomy and Evolution 07P Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
V	Group-B Group-H	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE- DCEZY -1 DCEZY -1	Skill Enhancement Course conomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) DESTRUCTION SET OF THE PRINCIPLE OF THE	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
V	Group-G Group-B	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCEZY-10 DCEZY -1 DCEZY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 -105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 05 Animal distribution and ecology 06 Taxonomy and Evolution 07P Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
v	Group-B Group-H	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 -105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 05 Animal distribution and ecology 06 Taxonomy and Evolution 07P Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course inical biochemistry pline Centric Elective Course (Chose any two group as per Sem. V)	2 2 2 2 2 2 2 2 2 2 2 2 4			
v	Group-B Group-H SBSBCH-04	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1	Skill Enhancement Course conomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) DESTRUCTION SET OF THE PRINCIPLE OF THE	2 2 2 2 2 2 2 2 2 2 2 16			
	Group-B Group-H	Discipl DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 C1 Disci	Skill Enhancement Course conomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) DESTRUCTION SET OF THE PRINCIPLE OF THE PRINCIPLE OF TOTAL CREDIT OF THE PRINCIPLE OF THE P	2 2 2 2 2 2 2 2 2 2 2 2 4			
V	Group-B Group-H SBSBCH-04	Discipl DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1	Skill Enhancement Course conomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) DESTRUCTION SET OF THE PRINCIPLE OF THE	4 2 2 2 2 2 2 2 2 2 16 4			
	Group-B Group-H SBSBCH-04	Discipl DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEBY -1 DCECHE -	Skill Enhancement Course conomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 15 Animal distribution and ecology 06 Taxonomy and Evolution 07P Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course inical biochemistry pline Centric Elective Course (Chose any two group as per Sem. V) 08 Molecular Genetics and Biotechnology 09 Paleobotany, Palynology and Economic 10P Practical Work based on DCEBY -108 and DCEBY -109 108 Organic Chemistry III (Selected Topics In Organic Chemistry) 109 Physical Chemistry III (Selected Topics In Physical Chemistry)	2 2 2 2 2 2 2 2 2 2 2 4 4			
	Group-G Group-H SBSBCH-04 Group-G	Discipl DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE -	Skill Enhancement Course conomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 105 Animal distribution and ecology 06 Taxonomy and Evolution 07P Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course inical biochemistry pline Centric Elective Course (Chose any two group as per Sem. V) 08 Molecular Genetics and Biotechnology 09 Paleobotany, Palynology and Economic 10P Practical Work based on DCEBY -108 and DCEBY -109 108 Organic Chemistry III (Selected Topics In Organic Chemistry) 109 Physical Chemistry III (Selected Topics In Physical Chemistry) 110P Practical Work based on DCECHE -108 and DCECHE -109	4 2 2 2 2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
	Group-G Group-H SBSBCH-04 Group-G Group-B	Discipl DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCECHE -	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 105 Animal distribution and ecology 06 Taxonomy and Evolution 07P Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course inical biochemistry pline Centric Elective Course (Chose any two group as per Sem. V) 08 Molecular Genetics and Biotechnology 09 Paleobotany, Palynology and Economic 10P Practical Work based on DCEBY -108 and DCEBY -109 108 Organic Chemistry III (Selected Topics In Organic Chemistry) 110P Practical Work based on DCECHE -108 and DCECHE -109 08 Developmental Biology	4 2 2 2 2 2 2 2 2 2 2 16 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
	Group-G Group-H SBSBCH-04 Group-G	Discipl DCEBY -1 DCEBY -1 DCECHE - DCECHE- DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEZY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCEBY -1 DCECHE - DCECHE - DCECHE -	Skill Enhancement Course onomic zoology and environmental biology ine Centric Elective Course (Chose any two group from G, B and H) 05 Embryology and Morphogenesis 06 Plant Pathology and Microbiology 07P Practical Work based on DCEBY -105 and DCEBY -106 105 Physical Chemistry II (Advance Physical Chemistry) 106 Inorganic Chemistry III (Selected Topics In Inorganic Chemistry) 107P Practical Work based on DCECHE -105 and DCECHE -106 05 Animal distribution and ecology 06 Taxonomy and Evolution 07P Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course inical biochemistry pline Centric Elective Course (Chose any two group as per Sem. V) 08 Molecular Genetics and Biotechnology 09 Paleobotany, Palynology and Economic 10P Practical Work based on DCEBY -108 and DCEBY -109 108 Organic Chemistry III (Selected Topics In Organic Chemistry) 110P Practical Work based on DCECHE -108 and DCECHE -109 108 Developmental Biology 109 Molecular Biology and Genetic Engineering	4 2 2 2 2 2 2 2 2 2 4 16 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			

C-8: Combination (Botany, Zoology, Biochemistry)

Semester	Course Co		7, Biochemistry) Title of course	Credits
2	Compulsory Core Course			JI CUILD
	UGBY -10		gy and Genetic	2
	UGBCH-10		action to biochemistry	2
	UGZY-10	1 Anima	l Physiology	2
	UGBY -10	1P Practic	al Work based on UGBY -101	2
I	UGBCH-10	01P Practic	cal Work Based on UGBCH -101	2
	UGZY-101		al Work Based on UGZY -101	2
	0321 101	Tractic	Ability Enhancement Course	
	ABCEG Ability Enhancement Course in English			4
	OR		OR	OR
	AECHD Ability		Enhancement Course in Hindi	4
	Total Credit (1st Semester)			16
	Compulsory Core Course UGBY -102 Plant Physiology		2	
			onal biochemistry	2
			•	
			ity of Animal life	2
			al Work based on UGBY -102	2
II	UGBCH-102P Pract		al Work Based on UGBCH -102	2
	UGZY-102P Practica		al Work Based on UGZY -102	2
	Ability Enhancement Course			
	AECEA Ability Enhancement Course in Environment Awareness			4
			Total Credit (2 nd Semester)	16
	Compulsory Core Course			
	UGBY -103 Plant Diversity-I			2
	UGBCH-103 Intern		ediary metabolism	2
III			c and Cell Biology	2
			tal Work based on UGBY -103 tal Work Based on UGBCH -103	2 2
			al Work Based on UGZY -103	2
	Skill Enhancement Course			
	SBSBCH-01 Bio-analytic		alytical techniques	4
	Total Credit (3 rd Semester)			16
	Compulsory Core Course			
	UGBY -10		Diversity-II	2
			nology hordata and Chordata	2 2
IV			al Work based on UGBY -104	2
17			al Work Based on UGBCH -104	2
	UGZY-104P Practical Work Based on UGZY -104 Skill Enhancement Course			2
	SBSBY-02 Ecology			4
	Total Credit (4 th Semester)			16
	Skill Enhancement Course			
	SBSZY-03 Economic zoology and environmental biology Discipline Centric Elective Course (Chose any two group from G, F and H)			4
\mathbf{v}		DCEBY -105	Embryology and Morphogenesis	2
		DCEBY -106	Plant Pathology and Microbiology	2
	Group-G	DCEB 1 -100	D .: 1W 11 1 DCEDY 105 1DCEDY 106	•
	Group-G	DCEBY -107P	Practical Work based on DCEBY -105 and DCEBY -106	2
		DCEBY -107P DCEBCH -105	Microbiology	2
	Group-G Group-F	DCEBY -107P	Microbiology Spectroscopy	2
		DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY-105	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology	2 2 2 2
		DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY-105 DCEZY -106	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution	2 2 2 2 2 2
	Group-F	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY-105	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106	2 2 2 2
	Group-F	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY-105 DCEZY -106	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution	2 2 2 2 2 2 2
	Group-F	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107P DCEZY-105 DCEZY -106 DCEZY -107P	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester)	2 2 2 2 2 2 2
	Group-F Group-H	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY-105 DCEZY -106 DCEZY -107P Clinic Disciplin	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry e Centric Elective Course (Chose any two group as per Sem. V)	2 2 2 2 2 2 2 2 16
	Group-H SBSBCH-04	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY -105 DCEZY -106 DCEZY -107P Clinic Disciplin DCEBY -108	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry Centric Elective Course (Chose any two group as per Sem. V) Molecular Genetics and Biotechnology	2 2 2 2 2 2 2 16
	Group-F Group-H	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY -106 DCEZY -107P Clinic Disciplin DCEBY -108 DCEBY -109	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry e Centric Elective Course (Chose any two group as per Sem. V) Molecular Genetics and Biotechnology Paleobotany, Palynology and Economic	2 2 2 2 2 2 2 16 4
VI	Group-H SBSBCH-04	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY -105 DCEZY -106 DCEZY -107P Clinic Disciplin DCEBY -108	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry Centric Elective Course (Chose any two group as per Sem. V) Molecular Genetics and Biotechnology	2 2 2 2 2 2 2 16 4
VI	Group-H SBSBCH-04	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107F DCEZY -105 DCEZY -106 DCEZY -107P Clinic Disciplin DCEBY -108 DCEBY -109 DCEBY -110P DCEBCH -108 DCEBCH -108 DCEBCH -109	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry e Centric Elective Course (Chose any two group as per Sem. V) Molecular Genetics and Biotechnology Paleobotany, Palynology and Economic Practical Work based on DCEBY -108 and DCEBY -109 Plant biochemistry Immunology	2 2 2 2 2 2 16 4
VI	Group-H SBSBCH-04 Group-G	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107P DCEZY-105 DCEZY -106 DCEZY -107P Clinic Disciplin DCEBY -108 DCEBY -109 DCEBY -110P DCEBCH -108 DCEBCH -109 DCEBCH -110P	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry e Centric Elective Course (Chose any two group as per Sem. V) Molecular Genetics and Biotechnology Paleobotany, Palynology and Economic Practical Work based on DCEBY -108 and DCEBY -109 Plant biochemistry Immunology Practical Work Based on DCEBCH -108 & DCEBCH -109	2 2 2 2 2 2 2 16 4
VI	Group-F Group-H SBSBCH-04 Group-G Group-F	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107P DCEZY-105 DCEZY -106 DCEZY -107P Clinic Disciplin DCEBY -108 DCEBY -109 DCEBY -110P DCEBCH -108 DCEBCH -109 DCEBCH -109 DCEBCH -109	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry e Centric Elective Course (Chose any two group as per Sem. V) Molecular Genetics and Biotechnology Paleobotany, Palynology and Economic Practical Work based on DCEBY -108 and DCEBY -109 Plant biochemistry Immunology Practical Work Based on DCEBCH -108 & DCEBCH -109 Developmental Biology	2 2 2 2 2 2 16 4
VI	Group-H SBSBCH-04 Group-G	DCEBY -107P DCEBCH -105 DCEBCH -106 DCEBCH -107P DCEZY-105 DCEZY -106 DCEZY -107P Clinic Disciplin DCEBY -108 DCEBY -109 DCEBY -110P DCEBCH -108 DCEBCH -109 DCEBCH -110P	Microbiology Spectroscopy Practical Work Based on DCEBCH -105 & DCEBCH -106 Animal distribution and ecology Taxonomy and Evolution Practical Work based on DCEZY -105 and DCEZY -106 Total Credit (5 th Semester) Skill Enhancement Course al biochemistry e Centric Elective Course (Chose any two group as per Sem. V) Molecular Genetics and Biotechnology Paleobotany, Palynology and Economic Practical Work based on DCEBY -108 and DCEBY -109 Plant biochemistry Immunology Practical Work Based on DCEBCH -108 & DCEBCH -109	2 2 2 2 2 2 2 16 4