

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	Second Selected Subject	Third Selected Subject	Ability Enhancement Compulsory Course	Skill Based Course	Discipline Specific Course	Total credit
	Core papers with credit	Core papers with credit	Core papers with credit				
1 st 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:

Skill Enhancement Courses from 3 rd to 6 th semester									
S. No.	Combination of three courses	Semester and Course Code							
		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 5th and 6th Semester is given below:

Subjects/ semester	Physics (Group A)		Chemistry (Group B)		Mathematics (Group C)		Computer Science (Group D)		Statistics (Group E)		Biochemistry (Group F)		Botany (Group G)		Zoology (Group H)	
	Paper code	credit	Paper code	credit	Paper code	credit	Paper code	credit	Paper code	credit	Paper code	credit	Paper code	credit	Paper code	credit
5 th Semester	DECPHS-105	2	DECHE-105	2	DECM-109	2	DECCS-105	2	DECSTAT-105	2	DECBC-105	2	DECBY-105	2	DECZY-105	2
	DECPHS-106	2	DECHE-106	2	DECM-110	2	DECCS-106	2	DECSTAT-106	2	DECBC-106	2	DECBY-106	2	DECZY-106	2
	DECPHS-107P	2	DECHE-107P	2	DECM-111P	2	DECCS-107P	2	DECSTAT-107P	2	DECBC-107P	2	DECBY-107P	2	DECZY-107P	2
6 th Semester	DECPHS-108	2	DECHE-108	2	DECM-112	2	DECCS-108	2	DECSTAT-108	2	DECBC-108	2	DECBY-108	2	DECZY-108	2
	DECPHS-109	2	DECHE-109	2	DECM-113	2	DECCS-109	2	DECSTAT-109	2	DECBC-109	2	DECBY-109	2	DECZY-109	2
	DECPHS-110P	2	DECHE-110P	2	DECM-114P	2	DECCS-110P	2	DECSTAT-110P	2	DECBC-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. Marks
	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	
I	Compulsory Core Course			
	UGPHS -101	Vector, Mechanics and General Physics	2	
	UGCHE-101	Inorganic Chemistry I (Basic Inorganic Chemistry)	2	
	UGMM-101	Differential Calculus	2	
	UGMM-102	Analytical Geometry	2	
	UGPHS -101P	Practical Work based on UGPHS -101	2	
	UGCHE-101P	Practical Work based on UGCHE-101	2	
	Ability Enhancement Course			
	AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 OR 4	
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGPHS -102	Oscillation, waves and electrical circuits	2	
	UGCHE-102	Organic Chemistry I (Basic Organic Chemistry)	2	
	UGMM-103	Integral Calculus	2	
	UGMM-104	Differential Equation	2	
	UGPHS -102P	Practical Work based on UGPHS -102	2	
	UGCHE-102P	Practical Work based on UGCHE-102	2	
	Ability Enhancement Course			
	AECEA	Ability Enhancement Course in Environment Awareness	4	
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGPHS -103	Electromagnetism	2	
	UGCHE-103	Physical Chemistry I (Basic Physical Chemistry)	2	
	UGMM-105	Mechanics-I (Statics and Dynamics)	2	
	UGMM-106	Mechanics-II (Dynamics and Hydrodynamics)	2	
	UGPHS -103P	Practical Work based on UGPHS -103	2	
	UGCHE-103P	Practical Work based on UGCHE-103	2	
	Skill Enhancement Course			
	SBSCHE-01	Organic Chemistry II (Advance Organic Chemistry)	4	
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGPHS -104	Analog and Digital Electronics	2	
	UGCHE-104	Inorganic Chemistry II (Advance Inorganic Chemistry)	2	
	UGMM-107	Linear Algebra	2	
	UGMM-108	Calculus of function of several variable and Vector Calculus	2	
	UGPHS -104P	Practical Work based on UGPHS -104	2	
	UGCHE-104P	Practical Work based on UGCHE-104	2	
	Skill Enhancement Course			
	SBSPHS-02	Modern physics	4	
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSMM-03	Elementary Analysis	4	
	Discipline Centric Elective Course (Chose any two group from A, B and C)			
	Group-A	DCEPHS -105	Optics	2
		DCEPHS -106	Thermal Physics	2
		DCEPHS-107P	Practical Work based on DCEPHS -105 and DCEPHS -106	2
	Group-B	DCECHE -105	Physical Chemistry II (Advance Physical Chemistry)	2
		DCECHE -106	Inorganic Chemistry III (Selected Topics In Inorganic Chemistry)	2
		DCECHE-107P	Practical Work based on DCECHE -105 and DCECHE -106	2
Group-C	DCEMM -109	Abstract Algebra	2	
	DCEMM -110	Number Theory	2	
	DCEMM-111(P)	Viva Voce	2	
Total Credit (5th Semester)			16	
VI	Skill Enhancement Course			
	SBSSTAT-04	Numerical Methods & Basic Computer Knowledge	4	
	Discipline Centric Elective Course (Chose any two group as per Sem. V)			
	Group-A	DCEPHS -108	Quantum mechanics and spectroscopy	2
		DCEPHS -109	Solid State Physics and Advanced Electronics	2
		DCEPHS-110P	Practical Work based on DCEPHS-108 and DCEPHS-109	2
	Group-B	DCECHE -108	Organic Chemistry III (Selected Topics In Organic Chemistry)	2
		DCECHE -109	Physical Chemistry III (Selected Topics In Physical Chemistry)	2
		DCECHE-110P	Practical Work based on DCECHE -108 and DCECHE -109	2
Group-C	DCEMM -112	Advance Analysis	2	
	DCEMM -113	Function of Complex Variable	2	
	DCEMM-114(P)	Viva Voce	2	
Total Credit (6th Semester)			16	

C-2: Combination (Physics, Chemistry, Statistics)

Semester	Course Code	Title of course	Credits	
I	Compulsory Core Course			
	UGPHS -101	Vector, Mechanics and General Physics	2	
	UGCHE-101	Inorganic Chemistry I (Basic Inorganic Chemistry)	2	
	UGSTAT-101	Statistical Methods	2	
	UGPHS -101P	Practical Work based on UGPHS -101	2	
	UGCHE-101P	Practical Work based on UGCHE-101	2	
	UGSTAT-101P	Practical Work based on UGSTAT -101	2	
	Ability Enhancement Course			
	AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 OR 4	
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGPHS -102	Oscillation, waves and electrical circuits	2	
	UGCHE-102	Organic Chemistry I (Basic Organic Chemistry)	2	
	UGSTAT-102	Probability, Distribution and Statistical Inference	2	
	UGPHS -102P	Practical Work based on UGPHS -102	2	
	UGCHE-102P	Practical Work based on UGCHE-102	2	
	UGSTAT-102P	Practical Work based on UGSTAT -102	2	
	Ability Enhancement Course			
	AECEA	Ability Enhancement Course in Environment Awareness	4	
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGPHS -103	Electromagnetism	2	
	UGCHE-103	Physical Chemistry I (Basic Physical Chemistry)	2	
	UGSTAT-103	Sampling Theory and Design of Experiments	2	
	UGPHS -103P	Practical Work based on UGPHS -103	2	
	UGCHE-103P	Practical Work based on UGCHE-103	2	
	UGSTAT-103P	Practical Work based on UGSTAT -103	2	
	Skill Enhancement Course			
	SBSICHE-01	Organic Chemistry II (Advance Organic Chemistry)	4	
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGPHS -104	Analog and Digital Electronics	2	
	UGCHE-104	Inorganic Chemistry II (Advance Inorganic Chemistry)	2	
	UGSTAT-104	Applied Statistics	2	
	UGPHS -104P	Practical Work based on UGPHS -104	2	
	UGCHE-104P	Practical Work based on UGCHE-104	2	
	UGSTAT-104P	Practical Work based on UGSTAT -104	2	
	Skill Enhancement Course			
	SBSPHS-02	Modern physics	4	
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSMM-03	Elementary Analysis	4	
	Discipline Centric Elective Course (Chose any two group from A, B and E)			
	Group-A	DCEPHS -105	Optics	2
		DCEPHS -106	Thermal Physics	2
		DCEPHS-107P	Practical Work based on DCEPHS -105 and DCEPHS -106	2
	Group-B	DCECHE -105	Physical Chemistry II (Advance Physical Chemistry)	2
		DCECHE -106	Inorganic Chemistry III (Selected Topics In Inorganic Chemistry)	2
		DCECHE-107P	Practical Work based on DCECHE -105 and DCECHE -106	2
Group-E	DCESTAT -105	Advance Statistical Inference	2	
	DCESTAT -106	Basic Knowledge of Statistical Softwares	2	
	DCESTAT-107P	Practical Work based on DCESTAT -105 and DCESTAT -106	2	
Total Credit (5th Semester)			16	
VI	Skill Enhancement Course			
	SBSSTAT-04	Numerical Methods & Basic Computer Knowledge	4	
	Discipline Centric Elective Course (Chose any two group as per Sem. V)			
	Group-A	DCEPHS -108	Quantum mechanics and spectroscopy	2
		DCEPHS -109	Solid State Physics and Advanced Electronics	2
		DCEPHS-110P	Practical Work based on DCEPHS-108 and DCEPHS-109	2
	Group-B	DCECHE -108	Organic Chemistry III (Selected Topics In Organic Chemistry)	2
		DCECHE -109	Physical Chemistry III (Selected Topics In Physical Chemistry)	2
		DCECHE-110P	Practical Work based on DCECHE -108 and DCECHE -109	2
Group-E	DCESTAT-108	Official Statistics	2	
	DCESTAT -109	Operation Research	2	
	DCESTAT-110	Practical Work based on DCESTAT -108 and DCESTAT -109	2	
Total Credit (6th Semester)			16	

C-3: Combination (Physics, Mathematics, Computer Science)

Semester	Course Code	Title of course	Credits	
I	Compulsory Core Course			
	UGPHS -101	Vector, Mechanics and General Physics	2	
	UGCS-101	Statistical Methods	2	
	UGMM-101	Differential Calculus	2	
	UGMM-102	Analytical Geometry	2	
	UGPHS -101P	Practical Work based on UGPHS -101	2	
	UGCS-101P	Practical Work based on UGCS -101	2	
	Ability Enhancement Course			
	AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 4	
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGPHS -102	Oscillation, waves and electrical circuits	2	
	UGCS-102	Probability, Distribution and Statistical Inference	2	
	UGMM-103	Integral Calculus	2	
	UGMM-104	Differential Equation	2	
	UGPHS -102P	Practical Work based on UGPHS -102	2	
	UGCS-102P	Practical Work based on UGCS -102	2	
	Ability Enhancement Course			
	AECEA	Ability Enhancement Course in Environment Awareness	4	
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGPHS -103	Electromagnetism	2	
	UGCS-103	Data Structures	2	
	UGMM-105	Mechanics-I (Statics and Dynamics)	2	
	UGMM-106	Mechanics-II (Dynamics and Hydrodynamics)	2	
	UGPHS -103P	Practical Work based on UGPHS -103	2	
	UGCS-103P	Practical Work based on UGCS -103	2	
	Skill Enhancement Course			
	SBSCS-01	Discrete Mathematics	4	
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGPHS -104	Analog and Digital Electronics	2	
	UGCS-104	Introduction to Database Management System	2	
	UGMM-107	Linear Algebra	2	
	UGMM-108	Calculus of function of several variable and Vector Calculus	2	
	UGPHS -104P	Practical Work based on UGPHS -104	2	
	UGCS-104P	Practical Work based on UGCS -104	2	
	Skill Enhancement Course			
	SBSPHS-02	Modern physics	4	
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSMM-03	Elementary Analysis	4	
	Discipline Centric Elective Course (Chose any two group from A, D and C)			
	Group-A	DCEPHS -105 DCEPHS -106 DCEPHS-107P	Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106	2 2 2
	Group-D	DCECS -105 DCECS -106 DCECS-107P	Computer Network Operating System Practical Work based on DCECS -106	2 2 2
	Group-C	DCEMM -109 DCEMM -110 DCEMM-111(P)	Abstract Algebra Number Theory Viva Voce	2 2 2
	Total Credit (5th Semester)			16
	VI	Skill Enhancement Course		
		SBSSTAT-04	Numerical Methods & Basic Computer Knowledge	4
Discipline Centric Elective Course (Chose any two group as per Sem. V)				
Group-A		DCEPHS -108 DCEPHS -109 DCEPHS-110P	Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109	2 2 2
Group-D		DCECS -108 DCECS -109 DCECS-110P	C++ and Object Oriented Programming Software Engineering Practical Work based on DCECS -108	2 2 2
Group-C		DCEMM -112 DCEMM -113 DCEMM-114(P)	Advance Analysis Function of Complex Variable Viva Voce	2 2 2
Total Credit (6th Semester)			16	

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

Semester	Course Code	Title of course	Credits	
I	Compulsory Core Course			
	UGPHS -101	Vector, Mechanics and General Physics	2	
	UGSTAT-101	Statistical Methods	2	
	UGMM-101	Differential Calculus	2	
	UGMM-102	Analytical Geometry	2	
	UGPHS -101P	Practical Work based on UGPHS -101	2	
	UGSTAT-101P	Practical Work based on UGSTAT -101	2	
	Ability Enhancement Course			
	AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 OR 4	
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGPHS -102	Oscillation, waves and electrical circuits	2	
	UGSTAT -102	Probability, Distribution and Statistical Inference	2	
	UGMM-103	Integral Calculus	2	
	UGMM-104	Differential Equation	2	
	UGPHS -102P	Practical Work based on UGPHS -102	2	
	UGSTAT -102P	Practical Work based on UGSTAT -102	2	
	Ability Enhancement Course			
	AECEA	Ability Enhancement Course in Environment Awareness	4	
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGPHS -103	Electromagnetism	2	
	UGSTAT -103	Sampling Theory and Design of Experiments	2	
	UGMM-105	Mechanics-I (Statics and Dynamics)	2	
	UGMM-106	Mechanics-II (Dynamics and Hydrodynamics)	2	
	UGPHS -103P	Practical Work based on UGPHS -103	2	
	UGSTAT -103P	Practical Work based on UGSTAT -103	2	
	Skill Enhancement Course			
	SBSCS -01	Discrete Mathematics	4	
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGPHS -104	Analog and Digital Electronics	2	
	UGSTAT -104	Applied Statistics	2	
	UGMM-107	Linear Algebra	2	
	UGMM-108	Calculus of function of several variable and Vector Calculus	2	
	UGPHS -104P	Practical Work based on UGPHS -104	2	
	UGSTAT -104P	Practical Work based on UGSTAT -104	2	
	Skill Enhancement Course			
	SBSPHS-02	Modern physics	4	
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSMM-03	Elementary Analysis	4	
	Discipline Centric Elective Course (Chose any two group from A, E and C)			
	Group-A	DCEPHS -105 DCEPHS -106 DCEPHS-107P	Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106	2 2 2
	Group-E	DCESTAT -105 DCESTAT -106 DCESTAT-107P	Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106	2 2 2
	Group-C	DCEMM -109 DCEMM -110 DCEMM-111(P)	Abstract Algebra Number Theory Viva Voce	2 2 2
	Total Credit (5th Semester)			16
	VI	Skill Enhancement Course		
		SBSSTAT-04	Numerical Methods & Basic Computer Knowledge	4
Discipline Centric Elective Course (Chose any two group as per Sem. V)				
Group-A		DCEPHS -108 DCEPHS -109 DCEPHS-110P	Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109	2 2 2
Group-D		DCESTAT -108 DCESTAT -109 DCESTAT-110P	Official Statistics Operation Research Practical Work based on DCESTAT -108 and DCESTAT -109	2 2 2
Group-C		DCEMM -112 DCEMM -113 DCEMM-114(P)	Advance Analysis Function of Complex Variable Viva Voce	2 2 2
Total Credit (6th Semester)			16	

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

Semester	Course Code	Title of course	Credits	
I	Compulsory Core Course			
	UGPHS -101	Vector, Mechanics and General Physics	2	
	UGCS-101	Computer Fundamental & PC Software	2	
	UGSTAT-101	Statistical Methods	2	
	UGPHS -101P	Practical Work based on UGPHS -101	2	
	UGCS-101P	Practical Work based on UGCS -101	2	
	UGSTAT-101P	Practical Work based on UGSTAT -101	2	
	Ability Enhancement Course			
	AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 OR 4	
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGPHS -102	Oscillation, waves and electrical circuits	2	
	UGCS-102	C Programming	2	
	UGSTAT-102	Probability, Distribution and Statistical Inference	2	
	UGPHS -102P	Practical Work based on UGPHS -102	2	
	UGCS-102P	Practical Work based on UGCS -102	2	
	UGSTAT-102P	Practical Work based on UGSTAT -102	2	
	Ability Enhancement Course			
	AECEA	Ability Enhancement Course in Environment Awareness	4	
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGPHS -103	Electromagnetism	2	
	UGCS-103	Data Structures	2	
	UGSTAT-103	Sampling Theory and Design of Experiments	2	
	UGPHS -103P	Practical Work based on UGPHS -103	2	
	UGCS-103P	Practical Work based on UGCS -103	2	
	UGSTAT-103P	Practical Work based on UGSTAT -103	2	
	Skill Enhancement Course			
	SBSCS-01	Discrete Mathematics	4	
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGPHS -104	Analog and Digital Electronics	2	
	UGCS-104	Introduction to Database Management System	2	
	UGSTAT-104	Applied Statistics	2	
	UGPHS -104P	Practical Work based on UGPHS -104	2	
	UGCS-104P	Practical Work based on UGCS -104	2	
	UGSTAT-104P	Practical Work based on UGSTAT -104	2	
	Skill Enhancement Course			
	SBSPHS-02	Modern physics	4	
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSMM-03	Elementary Analysis	4	
	Discipline Centric Elective Course (Chose any two group from A, B and E)			
	Group-A	DCEPHS -105 DCEPHS -106 DCEPHS-107P	Optics Thermal Physics Practical Work based on DCEPHS -105 and DCEPHS -106	2 2 2
	Group-D	DCECS -105 DCECS -106 DCECS-107P	Computer Network Operating System Practical Work based on 106	2 2 2
	Group-E	DCESTAT -105 DCESTAT-106 DCESTAT-107P	Advance Statistical Inference Basic Knowledge of Statistical Softwares Practical Work based on DCESTAT -105 and DCESTAT -106	2 2 2
	Total Credit (5th Semester)			16
	VI	Skill Enhancement Course		
		SBSSTAT-04	Numerical Methods & Basic Computer Knowledge	4
Discipline Centric Elective Course (Chose any two group as per Sem. V)				
Group-A		DCEPHS -108 DCEPHS -109 DCEPHS-110P	Quantum mechanics and spectroscopy Solid State Physics and Advanced Electronics Practical Work based on DCEPHS-108 and DCEPHS-109	2 2 2
Group-D		DCECS -108 DCECS -109 DCECS-110P	C++ and Object Oriented Programming Software Engineering Practical Work based on 108	2 2 2
Group-E		DCESTAT -108 DCESTAT -109 DCESTAT-110P	Official Statistics Operation Research Practical Work based on DCESTAT -108 and DCESTAT -109	2 2 2
Total Credit (6th Semester)			16	

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

Semester	Course Code	Title of course	Credits	
I	Compulsory Core Course			
	UGSTAT -101	Statistical Methods	2	
	UGCS-101	Computer Fundamental & PC Software	2	
	UGMM-101	Differential Calculus	4	
	UGMM-102	Analytical Geometry		
	UGSTAT -101P	Practical Work based on UGSTAT -101	2	
	UGCS-101P	Practical Work based on UGCS -101	2	
	Ability Enhancement Course			
	AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 OR 4	
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGSTAT -102	Probability, Distribution and Statistical Inference	2	
	UGCS-102	C Programming	2	
	UGMM-103	Integral Calculus	2	
	UGMM-104	Differential Equation	2	
	UGSTAT -102P	Practical Work based on UGSTAT -102	2	
	UGCS-102P	Practical Work based on UGCS -102	2	
	Ability Enhancement Course			
	AECEA	Ability Enhancement Course in Environment Awareness	4	
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGSTAT -103	Sampling Theory and Design of Experiments	2	
	UGCS-103	Data Structures	2	
	UGMM-105	Mechanics-I (Statics and Dynamics)	2	
	UGMM-106	Mechanics-II (Dynamics and Hydrodynamics)	2	
	UGSTAT -103P	Practical Work based on UGSTAT -103	2	
	UGCS-103P	Practical Work based on UGCS -103	2	
	Skill Enhancement Course			
	SBSCS-01	Discrete Mathematics	4	
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGSTAT -104	Applied Statistics	2	
	UGCS-104	Introduction to Database Management System	2	
	UGMM-107	Linear Algebra	2	
	UGMM-108	Calculus of function of several variable and Vector Calculus	2	
	UGSTAT -104P	Practical Work based on UGSTAT -104	2	
	UGCS-104P	Practical Work based on UGCS -104	2	
	Skill Enhancement Course			
	SBSPHS-02	Modern physics	4	
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSMM-03	Elementary Analysis	4	
	Discipline Centric Elective Course (Chose any two group from E, D and C)			
	Group-E	DCESTAT -105	Advance Statistical Inference	2
		DCESTAT -106	Basic Knowledge of Statistical Softwares	2
		DCESTAT-107P	Practical Work based on DCESTAT -105 and DCESTAT -106	2
	Group-D	DCECS -105	Computer Network	2
		DCECS -106	Operating System	2
		DCECS -107P	Practical Work based on 106	2
	Group-C	DCEMM -109	Abstract Algebra	2
DCEMM -110		Number Theory	2	
DCEMM-111(P)		Viva Voce	2	
Total Credit (5th Semester)			16	
VI	Skill Enhancement Course			
	SBSSTAT-04	Numerical Methods & Basic Computer Knowledge	4	
	Discipline Centric Elective Course (Chose any two group as per Sem. V)			
	Group-E	DCESTAT -108	Official Statistics	2
		DCESTAT -109	Operation Research	2
		DCESTAT-110P	Practical Work based on DCESTAT -108 and DCESTAT -109	2
	Group-D	DCECS-108	C++ and Object Oriented Programming	2
		DCECS -109	Software Engineering	2
		DCECS -110P	Practical Work based on 108	2
	Group-C	DCEMM -112	Advance Analysis	2
DCEMM -113		Function of Complex Variable	2	
DCEMM-114(P)		Viva Voce	2	
Total Credit (6th Semester)			16	

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

Semester	Course Code	Title of course	Credits	
I	Compulsory Core Course			
	UGBY -101	Cytology and Genetic	2	
	UGCHE-101	Inorganic Chemistry I (Basic Inorganic Chemistry)	2	
	UGZY-101	Animal Physiology	2	
	UGBY -101P	Practical Work based on UGBY -101	2	
	UGCHE-101P	Practical Work based on UGCHE-101	2	
	UGZY-101P	Practical Work Based on UGZY -101	2	
	Ability Enhancement Course			
	AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 OR 4	
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGBY -102	Plant Physiology	2	
	UGCHE-102	Organic Chemistry I (Basic Organic Chemistry)	2	
	UGZY-102	Diversity of Animal life	2	
	UGBY -102P	Practical Work based on UGBY -102	2	
	UGCHE-102P	Practical Work based on UGCHE-102	2	
	UGZY-102P	Practical Work Based on UGZY -102	2	
	Ability Enhancement Course			
	AECEA	Ability Enhancement Course in Environment Awareness	4	
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGBY -103	Plant Diversity-I	2	
	UGCHE-103	Physical Chemistry I (Basic Physical Chemistry)	2	
	UGZY-103	Genetic and Cell Biology	2	
	UGBY -103P	Practical Work based on UGBY -103	2	
	UGCHE-103P	Practical Work based on UGCHE-103	2	
	UGZY-103P	Practical Work Based on UGZY -103	2	
	Skill Enhancement Course			
	SBSCH-01	Organic Chemistry II (Advance Organic Chemistry)	4	
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGBY -104	Plant Diversity-II	2	
	UGCHE-104	Inorganic Chemistry II (Advance Inorganic Chemistry)	2	
	UGZY-104	Hemichordata and Chordata	2	
	UGBY -104P	Practical Work based on UGBY -104	2	
	UGCHE-104P	Practical Work based on UGCHE-104	2	
	UGZY-104P	Practical Work Based on UGZY -104	2	
	Skill Enhancement Course			
	SBSBY-02	Ecology	4	
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSZY03	Economic zoology and environmental biology	4	
	Discipline Centric Elective Course (Chose any two group from G, B and H)			
	Group-G	DCEBY -105	Embryology and Morphogenesis	2
		DCEBY -106	Plant Pathology and Microbiology	2
		DCEBY -107P	Practical Work based on DCEBY -105 and DCEBY -106	2
	Group-B	DCECHE -105	Physical Chemistry II (Advance Physical Chemistry)	2
		DCECHE -106	Inorganic Chemistry III (Selected Topics In Inorganic Chemistry)	2
		DCECHE-107P	Practical Work based on DCECHE -105 and DCECHE -106	2
Group-H	DCEZY-105	Animal distribution and ecology	2	
	DCEZY -106	Taxonomy and Evolution	2	
	DCEZY -107P	Practical Work based on DCEZY -105 and DCEZY -106	2	
Total Credit (5th Semester)			16	
VI	Skill Enhancement Course			
	SBSBCH-04	Clinical biochemistry	4	
	Discipline Centric Elective Course (Chose any two group as per Sem. V)			
	Group-G	DCEBY -108	Molecular Genetics and Biotechnology	2
		DCEBY -109	Paleobotany, Palynology and Economic	2
		DCEBY -110P	Practical Work based on DCEBY -108 and DCEBY -109	2
	Group-B	DCECHE -108	Organic Chemistry III (Selected Topics In Organic Chemistry)	2
		DCECHE -109	Physical Chemistry III (Selected Topics In Physical Chemistry)	2
		DCECHE-110P	Practical Work based on DCECHE -108 and DCECHE -109	2
Group-H	DCEZY -108	Developmental Biology	2	
	DCEZY -109	Molecular Biology and Genetic Engineering	2	
	DCEZY -110P	Practical Work Based on DCEZY -108 & DCEZY -109	2	
Total Credit (6th Semester)			16	

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

Semester	Course Code	Title of course	Credits	
I	Compulsory Core Course			
	UGBY -101	Cytology and Genetic	2	
	UGBCH-101	Introduction to biochemistry	2	
	UGZY-101	Animal Physiology	2	
	UGBY -101P	Practical Work based on UGBY -101	2	
	UGBCH-101P	Practical Work Based on UGBCH -101	2	
	UGZY-101P	Practical Work Based on UGZY -101	2	
	Ability Enhancement Course			
AECEG OR AECHD	Ability Enhancement Course in English OR Ability Enhancement Course in Hindi	4 OR 4		
Total Credit (1st Semester)			16	
II	Compulsory Core Course			
	UGBY -102	Plant Physiology	2	
	UGBCH-102	Nutritional biochemistry	2	
	UGZY-102	Diversity of Animal life	2	
	UGBY -102P	Practical Work based on UGBY -102	2	
	UGBCH-102P	Practical Work Based on UGBCH -102	2	
	UGZY-102P	Practical Work Based on UGZY -102	2	
	Ability Enhancement Course			
AECEA	Ability Enhancement Course in Environment Awareness	4		
Total Credit (2nd Semester)			16	
III	Compulsory Core Course			
	UGBY -103	Plant Diversity-I	2	
	UGBCH-103	Intermediary metabolism	2	
	UGZY-103	Genetic and Cell Biology	2	
	UGBY -103P	Practical Work based on UGBY -103	2	
	UGBCH-103P	Practical Work Based on UGBCH -103	2	
	UGZY-103P	Practical Work Based on UGZY -103	2	
	Skill Enhancement Course			
SBSBCH-01	Bio-analytical techniques	4		
Total Credit (3rd Semester)			16	
IV	Compulsory Core Course			
	UGBY -104	Plant Diversity-II	2	
	UGBCH-104	Enzymology	2	
	UGZY-104	Hemichordata and Chordata	2	
	UGBY -104P	Practical Work based on UGBY -104	2	
	UGBCH-104P	Practical Work Based on UGBCH -104	2	
	UGZY-104P	Practical Work Based on UGZY -104	2	
	Skill Enhancement Course			
SBSBY-02	Ecology	4		
Total Credit (4th Semester)			16	
V	Skill Enhancement Course			
	SBSZY-03	Economic zoology and environmental biology	4	
	Discipline Centric Elective Course (Chose any two group from G, F and H)			
	Group-G	DCEBY -105	Embryology and Morphogenesis	2
		DCEBY -106	Plant Pathology and Microbiology	2
		DCEBY -107P	Practical Work based on DCEBY -105 and DCEBY -106	2
	Group-F	DCEBCH -105	Microbiology	2
		DCEBCH -106	Spectroscopy	2
DCEBCH -107P		Practical Work Based on DCEBCH -105 & DCEBCH -106	2	
Group-H	DCEZY-105	Animal distribution and ecology	2	
	DCEZY -106	Taxonomy and Evolution	2	
	DCEZY -107P	Practical Work based on DCEZY -105 and DCEZY -106	2	
Total Credit (5th Semester)			16	
VI	Skill Enhancement Course			
	SBSBCH-04	Clinical biochemistry	4	
	Discipline Centric Elective Course (Chose any two group as per Sem. V)			
	Group-G	DCEBY -108	Molecular Genetics and Biotechnology	2
		DCEBY -109	Paleobotany, Palynology and Economic	2
		DCEBY -110P	Practical Work based on DCEBY -108 and DCEBY -109	2
	Group-F	DCEBCH -108	Plant biochemistry	2
		DCEBCH -109	Immunology	2
DCEBCH -110P		Practical Work Based on DCEBCH -108 & DCEBCH -109	2	
Group-H	DCEZY -108	Developmental Biology	2	
	DCEZY -109	Molecular Biology and Genetic Engineering	2	
	DCEZY -110P	Practical Work Based on DCEZY -108 & DCEZY -109	2	
Total Credit (6th Semester)			16	