

B.Sc. PROGRAMME – Structure (Basic / Hons.) (NEP)

DURATION OF THE COURSE: 4 YEARS (8SEMESTER)

B.Sc. Semester IV Structure

Sr.	Component	Course code	Course title	Duration (Hrs.)		Credit	ССЕ	SEE	TOTAL
No		Course coue		Theory	Practical	Creuit	CCE	SEL	IUIAL
	Major	MBM233-2C	Enzymology and Microbial Metabolism	60	0				
	Courses	MBM234-2C	Molecular Genetics of Prokaryotes	60	0				
	Microbiology	MBM235-2C	Microbiology Practical- IV	0	120				
	Major	CHM236-2C	Inorganic & Analytical Chemistry-II	60	0		50	50	
	Courses	CHM237-2C	Organic & Physical Chemistry-II	60	0				
1	Chemistry	CHM238-2C	Chemistry Practical's-IV	0	120	4*3=12			100
	Major Courses Physics	PHM239-2C	Basic Physics - V	60	0				100
		PHM240-2C	Basic Physics - VI	60	0				
		PHM241-2C	Physics Practical-IV	0	120				
	Major	MTM242-2C	Numerical Analysis	60	0				
	Courses	MTM243-2C	Differential Equations	60	0				
	Mathematics	MTM244-2C	Application of Numerical Analysis and Differential Equations	0	120				
		MBE221-2C	Analytical techniques in Microbiology-I	30	60	- 4 - 5			
2	Minor (Select any	CHE222-2C	Chemistry in Daily Life-Agriculture Chemistry	30	60		50	50	100
	One)	PHE223-2C	Introduction to Computational Physics with Python	30	60		30		100
		MTE224-2C	Python Programming	30	60				



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No				Theory	Practical		CCL	SEE	IUIAL
3	AEC	AEC 213-2C	Personality Development	30	0	2	25	25	50
4	VAC	VAC207-2C	Disaster Management/ Climate change/ Renewable energy	30	0	2	25	25	50
		SEC225-2C	Food Microbiology	30	0		25	25	
5		SEC226-2C	Industrial Chemistry-II	30	0				50
5	SEC	SEC SEC227-2C Physics in Biology and Medicine -II	30	0	2	25	25	50	
		SEC228-2C	Quantitative Aptitude-II	30	0	1			
	Total					22	275	275	550

Note:

1. Passing Percentage = 36% in each Component of every subject.



B.Sc. PROGRAMME – Structure (Basic / Hons.) (NEP) DURATION OF THE COURSE: 4 YEARS (8SEMESTER) B.Sc. Microbiology Semester IV Structure

Sr.	Component	mponent Course code	Course title	Duration (Hrs.)		Cardit	CCE	CEE	TOTAL
No				Theory	Practical	Credit	CCE	SEE	TOTAL
	Major	MBM233-2C	Enzymology and Microbial Metabolism	60	0				
1	Courses	MBM234-2C	Molecular Genetics of Prokaryotes	60	0	4*3=12	50	50	100
	Microbiology	MBM235-2C	Microbiology Practical- IV	0	120				
		MBE221-2C	Analytical techniques in Microbiology-I	30	60				
2	Minor (Select any One)	CHE222-2C	Chemistry in Daily Life-Agriculture Chemistry	30	60	4	50	50	100
		PHE223-2C	Introduction to Computational Physics with Python	30	60			50	100
		MTE224-2C	Python Programming	30	60				
3	AEC	AEC 213-2C	Personality Development	30	0	2	25	25	50
4	VAC	VAC207-2C	Disaster Management/ Climate change/ Renewable energy	30	0	2	25	25	50
		SEC225-2C	Food Microbiology	30	0				
5	SEC	SEC226-2C	Industrial Chemistry-II	30	0	2	25	25	50
5	SEC	SEC227-2C	Physics in Biology and Medicine -II	30	0			25	50
		SEC228-2C	Quantitative Aptitude-II	30	0				
	Total						275	275	550

Note:

1. Passing Percentage = 36% in each Component of every subject.



B.Sc. PROGRAMME – Structure (Basic / Hons.) (NEP) DURATION OF THE COURSE: 4 YEARS (8SEMESTER) B.Sc. Chemistry Semester IV Structure

Sr.	Component	nt Course and Cou	Commo title	Duration (Hrs.)		Cardit	CCE	SEE	TOTAL
No		Course code	Course title	Theory	Practical	Credit	CCE	SEE	TOTAL
	Major	CHM236-2C	Inorganic & Analytical Chemistry-II	60	0			50	
1	Courses	CHM237-2C	Organic & Physical Chemistry-II	60	0	4*3=12	50		100
	Chemistry	CHM238-2C	Chemistry Practical's-IV	0	120				
		MBE221-2C	Analytical techniques in Microbiology-I	30	60	- 4			
2	Minor (Select any One)	CHE222-2C	Chemistry in Daily Life-Agriculture Chemistry	30	60		50	50	100
2		PHE223-2C	Introduction to Computational Physics with Python	30	60		50	50	100
		MTE224-2C	Python Programming	30	60				
3	AEC	AEC 213-2C	Personality Development	30	0	2	25	25	50
4	VAC	VAC207-2C	Disaster Management/ Climate change/ Renewable energy	30	0	2	25	25	50
		SEC225-2C	Food Microbiology	30	0	2			
E	SEC	SEC226-2C	Industrial Chemistry-II	30	0		25	25	50
5	SEC	SEC227-2C	Physics in Biology and Medicine -II	30	0			25	50
		SEC228-2C	Quantitative Aptitude-II	30	0				
	Total						275	275	550

Note:

1. Passing Percentage = 36% in each Component of every subject.



B.Sc. PROGRAMME – Structure (Basic / Hons.) (NEP) DURATION OF THE COURSE: 4 YEARS (8SEMESTER) B.Sc. Physics Semester IV Structure

Sr.	Component	t Course code	Course title	Duration (Hrs.)		Credit	CCE	CEE	TOTAL
No				Theory	Practical	Credit	CCE	SEE	TOTAL
	Major	PHM239-2C	Basic Physics - V	60	0			50	
1	Courses	PHM240-2C	Basic Physics - VI	60	0	4*3=12	50		100
	Physics	PHM241-2C	Physics Practical-IV	0	120				
		MBE221-2C	Analytical techniques in Microbiology-I	30	60		50	50	
2	Minor (Select any One)	CHE222-2C	Chemistry in Daily Life-Agriculture Chemistry	30	60	4			100
		PHE223-2C	Introduction to Computational Physics with Python	30	60				100
		MTE224-2C	Python Programming	30	60				
3	AEC	AEC 213-2C	Personality Development	30	0	2	25	25	50
4	VAC	VAC207-2C	Disaster Management/ Climate change/ Renewable energy	30	0	2	25	25	50
		SEC225-2C	Food Microbiology	30	0	2			
5	SEC	SEC226-2C	Industrial Chemistry-II	30	0		25	25	50
5	SEC	SEC227-2C	Physics in Biology and Medicine -II	30	0			25	50
		SEC228-2C	Quantitative Aptitude-II	30	0				
	Total						275	275	550

Note:

1. Passing Percentage = 36% in each Component of every subject.



B.Sc. PROGRAMME – Structure (Basic / Hons.) (NEP) DURATION OF THE COURSE: 4 YEARS (8SEMESTER) B.Sc. Mathematics Semester IV Structure

Sr.	Component	t Course code	Course title	Duration (Hrs.)		Crudit	CCE	CEE	ТОТАІ
No				Theory	Practical	Credit	CCE	SEE	TOTAL
	Major	MTM242-2C	Numerical Analysis	60	0				
1	Courses	MTM243-2C	Differential Equations	60	0	4*3=12	50	50	100
	Mathematics	MTM244-2C	Application of Numerical Analysis and Differential Equations	0	120				
		MBE221-2C	Analytical techniques in Microbiology-I	30	60	- 4	50		
2	Minor (Select any One)	CHE222-2C	Chemistry in Daily Life-Agriculture Chemistry	30	60			50	100
		PHE223-2C	Introduction to Computational Physics with Python	30	60			50	100
		MTE224-2C	Python Programming	30	60				
3	AEC	AEC 213-2C	Personality Development	30	0	2	25	25	50
4	VAC	VAC207-2C	Disaster Management/ Climate change/ Renewable energy	30	0	2	25	25	50
		SEC225-2C	Food Microbiology	30	0	2	25		
5	SEC	SEC226-2C	Industrial Chemistry-II	30	0			25	50
5	SEC	SEC227-2C	Physics in Biology and Medicine -II	30	0			25	50
		SEC228-2C	Quantitative Aptitude-II	30	0				
	Total						275	275	550

Note:

1. Passing Percentage = 36% in each Component of every subject.