

Physics

(A) Major Core Courses

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	MJC-1(T)	Introduction to Mathematical Physics & Classical Mechanics- (T)	4	100
		MJC-1 (P)	Introduction to Mathematical Physics & Classical Mechanics- (P)	2	100
2.	II	MJC-2 (T)	Oscillations& Waves (T)	4	100
		MJC-2 (P)	Oscillations& Waves (P)	2	100
3.	III	MJC-3 (T)	Thermal Physics & Thermodynamics (T)	3	100
		MJC-3 (P)	Thermal Physics & Thermodynamics (P)	2	100
4.		MJC-4 (T)	Electricity & Magnetism (T)	3	100
		MJC-4 (P)	Electricity & Magnetism (P)	1	100
5.	IV	MJC-5 (T)	Mathematical Physics and Introduction to Computational Methods (T)	3	100
		MJC-5 (P)	Mathematical Physics and Introduction to Computational Methods (P)	2	100
6.		MJC-6	Electrodynamics & Electromagnetism	5	100
7.		MJC-7 (T)	Optics (T)	3	100
		MJC-7 (P)	Optics (P)	2	
8.	V	MJC-8	Elements of Modern Physics	5	100
9.		MJC-9 (T)	Basic Electronics (T)	3	100
	MJC-9 (P)	Basic Electronics (P)	2	100	
10.	VI	MJC-10	Analytical Mechanics & Special Theory of Relativity	4	100
11.		MJC-11	Statistical Mechanics	5	100
12.		MJC-12 (T)	Quantum Mechanics & its Application (T)	3	100
		MJC-12 (P)	Quantum Mechanics & its Application (P)	2	100
13.	VII	MJC-13 (T)	Physics of Atomsand Nuclei (T)	3	100
		MJC-13 (P)	Physics of Atoms and Nuclei (P)	2	100
14.		MJC-14	Research Methodology	5	100
15.		MJC-15 (T)	Solid State Physics (T)	4	100
		MJC-15 (P)	Solid State Physics (P)	2	100
16.	VIII	MJC-16 (T)	Molecular Spectroscopy and LASER: Principles& Applications (T)	3	100
		MJC-16 (P)	Physics of Molecules and Laser (P)	1	100

Sub Total = 80

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14-06

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(A) Minor Courses to be offered by the Department for students of other Departments of Science

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	MIC-1	Introduction to Mathematical Physics & Classical Mechanics- (T)	2	100
		MIC-1	Introduction to Mathematical Physics & Classical Mechanics- (P)	1	100
2.		MIC-2	Oscillations & Waves (T)	2	100
		MIC-2	Oscillations & Waves (P)	1	100
3.	III	MIC-3 (T)	Thermal Physics & Thermodynamics (T)	2	100
			Thermal Physics & Thermodynamics (P)	1	100
4.	IV	MIC-4 (T)	Electricity & Magnetism (T)	2	100
		MIC-4 (P)	Electricity & Magnetism (P)	1	100
5.	V	MIC-5 (T)	Mathematical Physics and Introduction to Computational Methods (T)	2	100
		MIC-5 (P)	Mathematical Physics and Introduction to Computational Methods (P)	1	100
6.	V	MIC-6	Electrodynamics & Electromagnetism	3	100
7.	VI	MIC-7 (T)	Optics (T)	2	100
		MIC-7 (P)	Optics (P)	1	100
8.	VI	MIC-8	Elements of Modern Physics	3	100
9.	VII	MIC-9 (T)	Basic Electronics (T)	3	100
		MIC-9 (P)	Basic Electronics (P)	1	100
10.	VIII	MIC-10	Analytical Mechanics & Special Theory of Relativity	4	100

Sub Total = 32

(C) Multidisciplinary Courses to be offered

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	MDC-1	To be selected from the basket	3	100
2.	II	MDC-2	To be selected from the basket	3	100
3.	III	MDC-3	To be selected from the basket	3	100

Sub Total = 09

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(D) Ability Enhancement Courses to be offered

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	AEC-1	MIL	2	100
2.	II	AEC-2	Environmental Science	2	100
3.	III	AEC-3	Disaster Risk Management	2	100
4.	IV	AEC-4	NCC/NSS/NGOs/Social Service/ Scout and Guide/Sports	2	100

Sub Total = 08

(E) Skill Enhancement Courses to be offered

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	SEC-1	To be selected from the basket	3	100
2.	II	SEC-2	To be selected from the basket	3	100
3.	III	SEC-3	To be selected from the basket	3	100

Sub Total = 09

(F) Value Added Courses to be offered

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	VAC-1	To be selected from the basket	3	100
2.	II	VAC-2	To be selected from the basket	3	100

Sub Total = 06

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	v	INT-1	Summer Internship	4	100

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	VIII	RP-1	Research/Dissertation	12	100

Grand Total = 160 Credits

(G) Basket for Multidisciplinary Courses (MDC)

To be decided by Respective Department

(H) Basket for Skill Enhancement Courses (SEC)

See at the end of structure (this booklet)

(I) Basket for Value Added Courses (VAC)

See at the end of structure (this booklet)

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