# I-SEMSETER SYLLABUS DISTRIBUTION 2018 June 2018-October 2018

# PHY01(T) (5 Units)

UNIT	TOPICS	LECTURER
Ī	Mechanics: Inertial and Non-inertial frames, central force, etc	HP
II	Mechanics: Degrees of freedom, moment of inertia etc	CL
III	Optics: Fermat's principle, general theory of image formation etc.	RB
IV	Optics: Interference of light, diffraction of light, Dispersion and scattering etc	JS
IV	Optics: Polarisation etc	TM
V	Waves: Velocity of sound and acoustics of buildings etc	DS

#### II-SEMSETER SYLLABUS DISTRIBUTION 2018 November 2018 – May 2019

# PHY02(T) (4 Units)

UNIT	TOPICS	LECTURER
I	Electricity & Magnetism: Electric field due to a continuous charge distribution etc	HP+CL
II	Electricity & Magnetism: Non steady current etc. Alternating current etc	DS
III	Electronics: Basic circuit analysis etc. Rectifier etc	RB+JS
IV	Electronics: Single stage transistor amplifiers etc	TM+SPM

# III-SEMSETER SYLLABUS DISTRIBUTION 2018 June 2018 – October 2018

# PHY03(T) (4 Units)

UNIT	TOPICS	LECTURER
I	Thermal Physics: Review of K.E, Transport phenomena etc	JS
1	Thermodynamics: Laws of thermodynamics etc	TM+SPM
II	Thermal Physics: Liquefaction of gases, Black body radiation, Phase space etc.	RB
III	Waves & Oscillations: Simple Harmonic motion, waves, vibrating strings etc	HP+CL
IV	Quantum Mechanics	DS

# IV-SEMSETER SYLLABUS DISTRIBUTION 2018 November 2018 – May 2019

# PHY04(T) (3 Units)

UNIT	TOPICS	LECTURER
I	Atomic Physics: Atomic structure, X-Rays, Laser etc	JS+RB
II	Nuclear Physics: Review and artificial transmutation of elements	TM
II	Nuclear Physics: Nuclear fusion, fission, cosmic rays etc	DS
III	Solid State Physics: Crystal Structure, Diffaction by crystal, free electron theory of solid, superconductivity, etc	HP+CL

#### V-SEMSETER SYLLABUS DISTRIBUTION 2018 June 2018 – October 2018

# PHY05(T) (5 Units)

UNIT	TOPICS	LECTURER
I	Mathematical Physics: Vector, curvilinear coordinates, Matrices, Complex veriables	HP+JS
II	Mathematical Physics: Ordinary differential equation, Legendre Polynomial etc	CL
III	Mathematical Physics: Beta & Gamma functions, Tensor	HP+TM
IV	Quantum Mechanics: Particle wave packets etc	DS
V	Quantum Mechanics: Application of Schrodinger equation etc	DS

# PHY06(T) (5 Units)

UNIT	TOPICS	LECTURER
I	Electrodynamics: Differential Gauss etc	CL
II	Electrodynamics: Electromagnetic Potential etc	JS
III	Electronics: FET, BJT, JEET etc	TM
IV	Electronics: Characteristics of BJT, Clippers/limiters digital signals, etc	RB
V	Fortran Programming	RB

# VI-SEMSETER SYLLABUS DISTRIBUTION 2018 November 2018 – May 2019

# PHY07(T) (4 Units)

UNIT	TOPICS	LECTURER
I	Thermodynamic relations, Statistics& Probability etc	JS
I	Statics and probability	TM
I	Idea of generalised coordinates etc	RB
II	Thermodynamics & Quantum statistics	TM
III	Solid State Physics	SPM+CL
IV	Solid State Physics	SPM+CL

# PHY08(T) (5 Units)

UNIT	TOPICS	LECTURER
I	Spectroscopy: Space quantisation, two electron system etc	JS
II	Spectroscopy: Molecular spectra	RB
III	Nuclear Physics: Structure, composition of nucleus, radioactivity etc	HP
III	Nuclear Physics: Nuclear reaction, artificial radio activity etc	DS
IV	Nuclear Physics: Nuclear reaction and cosmic rays and elementary particles	DS