



LECTURE PLAN FOR NEET_PHYSICS (2021)

Holidays

S. No.	Chapter	Topics	Lecture number	Date of Lecture	Date of Completion	Date	Occasion
1	Units & Measurement	Introduction, Physical Quantities, Units, System of units, Fundamental, Derived, and supplementary units, Conversion of units	1	28 May, 21	9 Jun, 21	21-Jul-21	Bakre-id
2		Dimentional Analysis, Homogeneity principle.	1	29 May, 21		15-Aug-21	Independence Day
3		Dimensional Analysis, Uses and limitations of dimensional analysis.	1	31 May, 21		22-Aug-21	Rakshabandhan
4		Measurements: Parallax Method, Significant Figure, Rounding off.	1	2 Jun, 21		30-Aug-21	Janamashtmi
5		Errors, Propagation of errors	1	3 Jun, 21		02-Oct-21	Gandhi Jayanti
6		Questions on error analysis	1	4 Jun, 21		15-Oct-21	Dusshera
7		Vernier Callipers, Screw gauge	1	7 Jun, 21		19-Oct-21	Eid-e-Milad
8		Problem practice (PYQ)	1	9 Jun, 21		04-Nov-21	Diwali
9		Distance vs Displacement, Average speed, Average Velocity, Average Acceleration	1	11 Jun, 21		5-Nov-21	Diwali
10		Speed/Velocity	1	14 Jun, 21		10-Nov-21	Chhat Pooja
11		Questions in speed, velocity and acceleration	1	16 Jun, 21		19-Nov-21	Guru Nanak Jayanti
12		Acceleration & Non-uniformly Accelerated Motion	1	18 Jun, 21		25-Dec-21	Christmas Day

13	Motion in a straightline	Accelerated, Type of motion, equations of motion	1	21 Jun, 21	9 Jul, 21	1-Jan-22	New Year
14		Questions on Constant acceleration-1	1	23 Jun, 21		26-Jan-22	Republic Day
15		Questions on Constant acceleration-2	1	25 Jun, 21		19-Mar-22	Holi
16		Motion Under Gravity -1	1	28 Jun, 21			
17		Motion Under Gravity -2	1	30 Jun, 21			
18		Graph of one Dimension -1	1	2 Jul, 21			
19		Graph of one Dimension -2	1	5 Jul, 21			
20		Relative motion in one Dimension	1	7 Jul, 21			
21		Problem practice (PYQ)	1	9 Jul, 21			
22	Motion in a plane	Vectors (Introduction), Types of vectors, Unit vectors, Angle between vectors	1	12 Jul, 21			
23		Addition and Subtraction of vectors, Resolving of vectors	1	14 Jul, 21			
24		Dot product and application	1	16 Jul, 21			
25		Cross product and applications	1	19 Jul, 21			
26		General motion of 2D	1	23 Jul, 21			
27		Projectile motion. Ground to ground projectile	1	26 Jul, 21			
28		Projectile from a tower.	1	28 Jul, 21			
29		Relative Motion in 2D (Rain Man Problem, minimum distance of Approach.)	1	30 Jul, 21			
30		River Swimmer Problems, miscellaneous problems	1	2 Aug, 21			
31		Circular motion, Definition of angular variable, Centripetal acceleration, uniform and non uniform circular motion.	1	4 Aug, 21			
32		Problems on Circular motion	1	6 Aug, 21			

33		Problem practice(PYQ)	1	7 Aug, 21	7 Aug, 21		
34	Laws of Motion	Inertia, state of the body & First Law of Motion	1	9 Aug, 21			
35		Indroduction of Forces & 3rd Law	1	11 Aug, 21			
36		Questions on Equilibrium and free body diagram	1	13 Aug, 21			
37		Momentum, Implulse Momentum Theorumn, Conservation of momentum, Rocket Probleum	1	14 Aug, 21			
38		Dynamics, At wood machine pulley, Spring Balance	1	16 Aug, 21			
39		Constraint Relation	1	18 Aug, 21			
40		Pseudo Force	1	20 Aug, 21			
41		Friction 1	1	21 Aug, 21			
42		Friction 2	1	23 Aug, 21			
43		Dynamics of Circular motion -1	1	25 Aug, 21			
44		Dynamics of Circular motion -2	1	27 Aug, 21	27 Aug, 21		
45	Work, Energy and Power	Work, Work Done by constant force, Work done by variable force	1	28 Aug, 21			
46		Work energy theorem	1	1 Sep, 21			
47		Potential energy, Conservative forces, Relation between force and potential energy	1	3 Sep, 21			
48		Equilibrium and its types	1	4 Sep, 21			
49		Conservation of mechanical energy	1	6 Sep, 21			
50		Vertical circular motion 1	1	8 Sep, 21			
51		Vertical circular motion 2	1	10 Sep, 21			
52		Power	1	11 Sep, 21			

53		Problem practice (PYQ)	1	13 Sep, 21	13 Sep, 21		
54	Center of mass	Location of center of mass	1	15 Sep, 21			
55		Location of center of mass(negative system)	1	17 Sep, 21			
56		Motion of center of mass(Velocity and acceleration of center of mass). Conservation of linear momentum.	1	18 Sep, 21			
57		Applications of conservation of linear momentum, Jumping from the cart, recoil of gun, explosion of bombs	1	20 Sep, 21			
58		Collisions, Elastic/inelastic, headon	1	22 Sep, 21			
59		velocities after collision and loss of Kinetic energy and questions	1	24 Sep, 21			
60		oblique collisions.	1	25 Sep, 21			
61		Problem practice (PYQ)	1	27 Sep, 21	27 Sep, 21		
62	System of Particles	Moment of inertia, Perpendicular axis theorem, parallel axis theorem.	1	29 Sep, 21			
63		Radius of gyration and miscellaneous problems	1	1 Oct, 21			
64		Definition and Calculation of Torque	1	4 Oct, 21			
65		Rotational equilibrium	1	6 Oct, 21			
66		Newton's second law in Rotation	1	8 Oct, 21			
67		Kinematics of Rolling motion	1	9 Oct, 21			
68		Dynamics of rolling motion		9 Oct, 21			
69		Kinetic energy in rotational motion, Conservation of mechanical energy problems.	1	11 Oct, 21			
70		Calculation of Angular momentum	1	13 Oct, 21			
71		Conservation of angular momentum	1	16 Oct, 21			

72		Problem practice(PYQ)	1	18 Oct, 21	18 Oct, 21		
73	Gravitation	Newton's Law of Gravitation,	1	20 Oct, 21			
74		Gravitational Field, Acceleration due to gravity, Variation in acceleration due to gravity due to height, depth and rotation of earth.	1	22 Oct, 21			
75		Gravitational potential, Potential due to a point mass,	1	23 Oct, 21			
76		Potential due to a ring, potential due to spheres,	1	25 Oct, 21			
77		Gravitational potential energy, Relation between potential and potential energy. Escape velocity.	1	27 Oct, 21			
78		Orbits, circular orbits, satellites, geostationary satellites	1	29 Oct, 21			
79		Kepler laws	1	30 Oct, 21			
80		Problem practice(PYQ)	1	1 Nov, 21	1 Nov, 21		
81	Mechanical properties of solids	Stress, Strain, Hooke's law, Modulus of elasticity, Stress-strain Curve	1	3 Nov, 21			
82		Analogy of a spring, Elastic potential energy, Wires in series and parallel	1	6 Nov, 21			
83		Hanging wire, Breaking stress.	1	8 Nov, 21			
84		Problem practice(PYQ)	1	12 Nov, 21			
85		Pressure, Relative density, Variation of pressure with depth,	1	13 Nov, 21			
86		Pascal's Law, Hydraulic lift and brake,	1	15 Nov, 21			
87		Buoyancy and Archimedes Principle,	1	17 Nov, 21			
88		Problems on Archimedes principle, Liquid in accelerated containers	1	20 Nov, 21			

89		Types of flow, Bernoulli's Principle	1	22 Nov, 21		
90		Applications of Bernoulli's principle (Torricelli's equation, venturimeter)	1	24 Nov, 21		
91		Surface tension,	1	26 Nov, 21		
92		Excess pressure in a soap bubble and a liquid drop, Capillary action,	1	27 Nov, 21		
93		Viscosity, Stoke's law, Terminal velocity	1	29 Nov, 21		
94		Problem practice(PYQ)	1	1 Dec, 21	1 Dec, 21	
95	Thermal properties of matter	Temperature, Thermometry, Thermal expansion (Linear, superficial and cubical expansion), Thermal stress and strain,	1	3 Dec, 21		
96		Calorimetry, Specific heat capacity, Molar heat capacity, Latent heat of fusion and vaporization. Water equivalent.		3 Dec, 21		
97		Modes of heat transfer, Thermal conduction, Rods in series and parallel,	1	4 Dec, 21		
98		Miscellaneous circuits, Growth of ice on surface of lakes.	1	6 Dec, 21		
99		Radiation, Stefan's Law	1	8 Dec, 21		
100		Newton's law of cooling, Wien's displacement law.	1	10 Dec, 21		
101		Problem practice(PYQ)	1	11 Dec, 21	11 Dec, 21	
102	Kinetic theory of Gases	Postulates of Kinetic theory of gases, Ideal gas laws, Expression for pressure of an Ideal gas,	1	13 Dec, 21		
103		Degrees of freedom, law of equipartition of energy, Speed distribution curve, Mean free path. Problem practice(PYQ)	1	15 Dec, 21	15 Dec, 21	

104	Thermodynamics	Zeroth law of thermodynamics, Heat, work and internal energy, First law of thermodynamics,	1	17 Dec, 21	29 Dec, 21		
105		Thermodynamic processes (Isochoric, isobaric, isothermal, adiabatic, polytropic),	1	18 Dec, 21			
106		Indicator diagrams	1	20 Dec, 21			
107		Questions on thermodynamics process and indicator diagrams	1	22 Dec, 21			
108		Cyclic processes, Heat engine, Refrigerator, heat pump,	1	24 Dec, 21			
109		Second law of thermodynamics, Carnot cycle, Entropy.	1	27 Dec, 21			
110		Problem practice(PYQ)	1	29 Dec, 21			
111	Oscillations	Periodic motion, Simple harmonic motion, Equations of SHM,	1	31 Dec, 21	8 Jan, 22		
112		Circle Diagram, Energy in SHM,	1	3 Jan, 22			
113		Superposition of SHM, Time period of SHM, Linear SHM,	1	5 Jan, 22			
114		Angular SHM, Compound pendulum, Torsional Pendulum,	1	7 Jan, 22			
115		Damped oscillations, Forced Oscillations.	1	8 Jan, 22			
116		Problem practice(PYQ)		8 Jan, 22			
117		Equation of wave, particle speed, particle acceleration	1	10 Jan, 22			
118		Wave speed, Speed of sound, effect of pressure, temperature and humidity on speed of sound.	1	12 Jan, 22			
119		Interference, Intensity 1	1	14 Jan, 22			
120		Interference, Intensity 2	1	15 Jan, 22			

121	Wave Motion	Reflection of waves	1	17 Jan, 22	28 Jan, 22		
122		Standing waves, waves on string and organ pipes	1	19 Jan, 22			
123		Standing waves, waves on string and organ pipes,,	1	21 Jan, 22			
124		Sonometer wire, resonance column tube experiment, end correction, beats	1	22 Jan, 22			
125		Doppler effect.	1	24 Jan, 22			
126		Problem practice(PYQ)	1	28 Jan, 22			