

Objective
Paper Code
6475

Intermediate Part First
PHYSICS (Objective) GROUP - I
Time: 20 Minutes Marks: 17

Roll No. : _____



Q.No.1 You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill the relevant circle in front of that question number on computerized answer sheet. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero marks in that question. Attempt as many questions as given in objective type question paper and leave other circles blank.

S.#	Questions	A	B	C	D
1	The moment of inertia of a ring is equal to:	$\frac{1}{12}mr^2$	mr^2	$\frac{1}{2}mr^2$	$\frac{2}{5}mr^2$
2	1 kWh = :	3.6 μJ	3.6 mJ	3.6 kJ	3.6 MJ
3	The rate of change of momentum of a body equals to:	Work done	Applied power	Applied force	Impulse
4	The range of projectile is maximum when projectile is thrown at an angle of:	30°	45°	60°	90°
5	If $\vec{A} = 2\hat{i} - \hat{j} + 2\hat{k}$ then $A =$:	2	3	5	9
6	The area of the parallelogram formed with $\vec{A}$ and $\vec{B}$ as two adjacent sides is equal to:	$AB \sin \theta$	$AB \cos \theta$	$AB \tan \theta$	AB
7	The units of gravitational constant have units:	Nm^2kg^{-1}	$Nmkg^{-2}$	Nm^2kg^2	Nm^2kg^{-2}
8	Work have same dimensions as that of:	Momentum	Power	Torque	Impulse
9	Carnot engine consists of:	Two steps	Three steps	Four steps	Five steps
10	For adiabatic process, the first law of thermodynamics gives:	$Q = W$	$W = -\Delta U$	$Q = \Delta U$	$Q = \Delta U + W$
11	If N is the number of rulings on the grating, then the resolving power in the mth order diffraction is equal to:	$R = \frac{N}{m}$	$R = \frac{m}{N}$	$R = mN$	$R = \frac{1}{mN}$
12	The light from the Sun reaches the Earth with:	Circular wave fronts	Plane wave fronts	Spherical wave fronts	Elliptical wave fronts
13	The distance between a node and the next antinode is:	4λ	2λ	$\frac{\lambda}{4}$	$\frac{\lambda}{2}$
14	The increase in the speed of sound for one degree Celsius rise in temperature by:	$0.61cms^{-1}$	$0.61ms^{-1}$	$0.16cms^{-1}$	$0.16ms^{-1}$
15	If the length of a simple pendulum is doubled, its period:	Will not change	Will also be doubled	Will be halved	Will increase by 1.4 times
16	A chimney works best when it is:	Tall	Wide	Short	Narrow
17	The SI unit of angular displacement is:	Meter	Degree	Radian	Revolution

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