

Physics

Paper : I

HSSC (11th) 2nd Annual 2022

Time : 20 Minutes

Marks : 17

(To be filled in by the candidate)

Roll No.

Objective – (i)

Paper Code

6 4 7 1

Note: - You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number in your answer book. Use marker or pen to fill the circles. Cutting or filling up two or more circles will result no mark.

SECTION-A

Q.1	Questions	A	B	C	D
1.	System international was established in:	1960 ✓	1950	1970	1940
2.	SI unit of coefficient of viscosity is:	$\text{Kg m}^{-2} \text{S}^{-1}$	$\text{Kg m}^{-1} \text{S}^{-1}$ ✓	$\text{Kg m}^{-1} \text{S}^{-2}$	Kg m S
3.	Name the quantity which is vector:	Density	Power	Charge	Momentum ✓
4.	At what angle components of a vector have the same magnitude?	0°	30°	45° ✓	90°
5.	Dimensions of acceleration are:	$[\text{LT}^{-1}]$	$[\text{LT}^{-1}]$	$[\text{LT}^{-2}]$ ✓	$[\text{L}^{-1} \text{T}^{-2}]$
6.	Velocity of projectile at maximum height is:	$V_i \sin \theta$	$V_i \cos \theta$ ✓	Maximum	Zero
7.	If speed of moving body is doubled, its kinetic energy is:	Doubled	Halved	Unchanged	4 times ✓
8.	Pull of earth on mass of 20 kg on the surface of the earth is:	20 N	196 N ✓	19.6 N	1960 N
9.	Orbital radius of geostationary satellite from the earth surface is:	$3.23 \times 10^4 \text{ km}$	$5.24 \times 10^4 \text{ km}$	$4.23 \times 10^4 \text{ km}$ ✓	$223 \times 10^2 \text{ km}$ ✓
10.	Pressure will be low where speed of fluid is:	Zero	High ✓	Low	Constant
11.	Dimensions of spring constant are:	$[\text{MLT}^{-2}]$	$[\text{MT}^{-2}]$ ✓	$[\text{MLT}^{-1}]$	$[\text{MLT}^{-1}]$
12.	In standing waves if $\lambda = \ell$ (length of the string) then $100 P_s$ will be:	1	2	4	3
13.	Speed of sound in gas is:	$\frac{\gamma P}{\rho}$	$\frac{\rho P}{\gamma}$	$\frac{\gamma P}{\rho}$ ✓	$\sqrt{\frac{P}{\gamma \rho}}$
14.	If 5000 lines per centimeter are ruled on diffraction grating the slit spacing will be:	$5 \times 10^{-3} \text{ A}^\circ$	$2 \times 10^{-4} \text{ A}^\circ$	$2 \times 10^4 \text{ A}^\circ$ ✓	0.02 m
15.	How many types of optical fibre are in use?	Two	Four	Three ✓	Five
16.	All real heat engines are less efficient than Carnot engine due to:	Working substance ✓	Temperature of reservoirs	Temperature of cold reservoir	Friction ✓
17.	Isothermal process is a process which is carried out at constant:	Volume	Pressure	Energy	Temperature ✓

209-322-2A-350 ★

CANCELLED