Inter (Part-I) 2017

Physics	Group-I	PAPER: I
Time: 20 Minutes	(OBJECTIVE TYPE)	Marks: 17

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1- The triple point of water is:

   (a) 0 K   (b) 100 K

   (c) 273.16 K ✓   (d) 373.16 K

2- The time rate of change of angular displacement is called:

   (a) Linear velocity   (b) Linear speed

   (c) Angular speed   (d) Angular velocity ✓

3- The original source of tidal energy is:

   (a) Moon ✓   (b) Earth

   (c) Sun   (d) Sea

4- 2 radian = ---- :

   (a) $114.6°$ ✓   (b) $57.3°$

   (c) $75.3°$ (d) $37.5°$

5- A stationary wave is established in a string which vibrates in four segments at a frequency of 120 Hz. Its fundamental frequency is:

   (a) 15 Hz   (b) 30 Hz ✓

   (c) 60 Hz   (d) 480 Hz

6- If the pressure of the gas is doubled, then the speed of sound:

   (a) Is also doubled   (b) Becomes half

   (c) Is not affected ✓ (d) Increases by four times

7- Venturimeter is a device used to measure:
   (a) Pressure of fluid
   (b) Speed of fluid √
   (c) Density of fluid
   (d) Viscosity of fluid

8- If $|a + b| = |a - b|$, then angle between $\vec{a}$ and $\vec{b}$ is:
   (a) $0°$
   (b) $45°$
   (c) $90°$ √
   (d) $180°$

9- At constant temperature and pressure, if volume of given mass of a gas is doubled, then density of the gas becomes:
   (a) Double
   (b) $\frac{1}{4}$ of original
   (c) $\frac{1}{2}$ of original √
   (d) Unchanged

10- The horizontal range of a projectile at $30°$ with horizontal is same at an angle:
   (a) $40°$
   (b) $45°$
   (c) $90°$
   (d) $60°$ √

11- Newton's rings are formed as a result of:
   (a) Interference √
   (b) Dispersion
   (c) Diffraction
   (d) Polarization

12- The horizontal component of velocity of projectile:
   (a) Increases
   (b) Decreases
   (c) Increases or decreases
   (d) Remains constant √

13- The distance covered during one vibration of an oscillating body in terms of amplitude 'A' is:
   (a) A/2
   (b) A
   (c) 2A
   (d) 4A √

14- The ratio of moment of inertia of disc and hoop is:

(a) $\frac{1}{2}$ ✓　　　　(b) $\frac{1}{4}$

(c) $\frac{3}{4}$　　　　(d) $\frac{1}{3}$

15- A layer over the central core of the Jacket is called:

(a) Jacket　　　　(b) Plastic

(c) Cladding ✓　　(d) Rubber

16- To distinguish between transverse and longitudinal wave ---- is used:

(a) Refraction　　　(b) Interference

(c) Polarization ✓　(d) Diffraction

17- 1 tera = :

(a) 10^{15}　　　　(b) 10^{18}

(c) 10^{12} ✓　　　(d) 10^{-12}