

**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. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

1. Silicon is obtained from  
 (A) space (B) sand (C) moon (D) air
2.  $[ML^{-1}T^{-1}]$  is dimension of  
 (A) force (B) viscosity (C) power (D) energy
3. The vector of zero magnitude and arbitrary direction is called  
 (A) equal vector (B) null vector (C) unit vector (D) resultant vector
4. 1<sup>st</sup> condition of equilibrium is written as  
 (A)  $\vec{F} = 0$  (B)  $\sum \vec{F} = 0$  (C)  $\sum \vec{\tau} = 0$  (D)  $\vec{\tau} = 0$
5. A mass of fuel consumed by a typical rocket to overcome earth's gravity is  
 (A) 10000 Kgs<sup>-1</sup> (B) 1000 Kgs<sup>-1</sup> (C) 100 Kgs<sup>-1</sup> (D) 10 Kgs<sup>-1</sup>
6. Projectile motion is a  
 (A) three dimensional motion (B) one dimensional motion  
 (C) two dimensional motion (D) no dimensional motion
7. The total work done in a closed path in gravitational field is  
 (A) maximum (B) positive (C) zero (D) minimum
8. The relation for centripetal acceleration is given by  
 (A)  $\frac{v^2}{r}$  (B)  $v\omega$  (C)  $r\omega^2$  (D)  $a = \frac{f}{m}$
9. 1 GHz =  
 (A) 10<sup>13</sup>Hz (B) 10<sup>6</sup>Hz (C) 10<sup>15</sup>Hz (D) 10<sup>9</sup>Hz
10. Human blood pressure is measured in  
 (A) Nm<sup>-1</sup> (B) Nm<sup>-3</sup> (C) Nm<sup>-2</sup> (D) torr
11. Tuning of radio is an example of resonance  
 (A) mechanical (B) physical (C) magnetic (D) electrical
12. Ripples produced in water is an example of  
 (A) light waves (B) electromagnetic waves  
 (C) electronic waves (D) progressive waves
13. The speed of sound does not depend upon  
 (A) compressibility of fluids (B) inertia of fluids  
 (C) density of fluids (D) viscosity of fluids
14. In Young's double slit experiment, the position of dark fringe is expressed as  
 (A)  $y_m = \left(m + \frac{1}{2}\right) \frac{\lambda L}{d}$  (B)  $y_m = \left(m - \frac{1}{4}\right) \frac{\lambda L}{d}$   
 (C)  $y_m = \frac{m\lambda L}{d}$  (D)  $y_m = \frac{m\lambda d}{2L}$
15. Spectrometer consists of  
 (A) four parts (B) three parts (C) five parts (D) two parts
16. The sum of all molecular energies of a substance is called  
 (A) K.E. (B) P.E. (C) Internal energy (D) Chemical energy
17. Heat engine converts thermal energy into  
 (A) mechanical work (B) electrical energy (C) hydro energy (D) solar energy