Physics (SLO Based)

PR – IX (A-I-B) (24)

۱۔ ہر سوال کے سامنے چار دائرے دیئے گئے ہیں۔ صرف صحیح جواب والا دائرہ بھر دیں۔

۲۔ دائروں کو پُر (بھرنے) کے لیے نیلے یا کالے رنگ کا پن استعمال کریں۔

۳۔ جواب میں ایک سے زائد دائرے بھرنے سے جواب غلط تصور ہو گا۔

Time: 15 Min **SECTION-A** Marks: 12

1) The gravitational force between two bodies having masses 1 kg each and separated by a distance of 1m is:
   - ○ 6.67×10^{-9}N
   - ● 6.67×10^{-11}N
   - ○ 6.67×10^{9}N
   - ○ 6.67×10^{11}N

2) Kinetic energy is expressed as:
   - ○ mv2
   - ● $\frac{1}{2} mv^2$
   - ○ $\frac{1}{2} v^2$
   - ○ $\frac{1}{2} m^2V$

3) The percentage efficiency of a nuclear power plant that converts 320 KJ chemical energy to 80 KJ electrical energy is:
   - ○ 4%
   - ○ 20%
   - ● 25%
   - ○ 40%

4) Young's modulus is measured in unit of:
   - ○ N/m^2
   - ○ Kgm
   - ○ Kgm^{-2}
   - ● N/m

5) The direction of flow of heat between two objects is determined by their;
   - ○ Colour
   - ○ Weights
   - ● Temperature difference
   - ○ Separation

6) The transfer of heat from one place to another based on the bulk motion of molecules is carried in:
   - ○ Radiation
   - ○ Conduction
   - ● Convection
   - ○ Evaporation

7) The SI unit of length among the following is;
   - ○ Kilogram
   - ○ Kelvin
   - ○ Mole
   - ● Meter

8) In a death well, if a motorcyclist returns to its initial point, the magnitude of his displacement is:
   - ○ $2\pi r$
   - ○ 180m
   - ○ 609m
   - ● Zero

9) When we push a heavy crate horizontally, the crate does not move due to:
   - ○ Kinetic friction
   - ● Static friction
   - ○ Sliding friction
   - ○ Rolling friction

10) The centripetal force on a body of mass 3kg moving with velocity 5 m/s in circle of radius 3m is:
   - ○ 35N
   - ○ 30N
   - ● 25N
   - ○ 20N

11) In a right-angled triangle, the trigonometric function used to find horizontal component of a force is:
   - ○ $\sin\theta$
   - ● $\cos\theta$
   - ○ $\tan\theta$
   - ○ $\cot\theta$

12) A compact disk rotating in a CD player with constant angular velocity is the example of:
   - ○ Static equilibrium
   - ○ Translational equilibrium
   - ● Rotational equilibrium
   - ○ Neutral equilibrium