

Federal Board HSSC-I (2018)

PHYSICS HSSC-I

Model Question Paper (KPK)

SECTION – A (Marks 17)

Time: 25 Minutes

Marks: 17

Note: Section-A is compulsory. All parts of this section are to be answered on the separately provided OMR Answer Sheet which should be completed in the first 25 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q.1 Choose the correct answer i.e. A / B / C / D by filling the relevant bubble for each question on the OMR Answer Sheet according to the instructions given there. Each part carries one mark.

- i. What is the ratio $1\mu\text{m}/1\text{Gm}$?
A. 10^{-3} B. 10^{-9}
C. 10^{-12} D. 10^{-15}
- ii. For which angle the equation $|\vec{A} \cdot \vec{B}| = |\vec{A} \times \vec{B}|$ is correct?
A. 30° B. 45°
C. 60° D. 90°
- iii. What is the angle between \vec{A} and \vec{B} for which $|\vec{A} + \vec{B}| = |\vec{A} - \vec{B}|$?
A. 30° B. 45°
C. 60° D. 90°
- iv. What does NOT change when force is applied on a body?
A. Mass B. Velocity
C. Position D. Acceleration
- v. A projectile is thrown so that it travels a maximum range of 100m. How high will it rise?
A. 500 m B. 250 m
C. 400 m D. 1000 m
- vi. If momentum is increased by 20% then K.E increases by:
A. 44% C. 55%
D. 66% D. 77%
- vii. The atmosphere is held to the earth by:
A. winds B. gravity
C. clouds D. rotation of earth
- viii. The angular speed in rad/hrs for daily rotation of our earth is:
A. 2π B. 4π
C. $\frac{\pi}{6}$ D. $\frac{\pi}{12}$
- ix. Artificial satellite moves around:
A. Moon B. Sun
C. Stars D. Earth
- x. The pressure will be low where the speed of the fluid is:
A. Zero B. High
C. Low D. Constant
- xi. The periods of the pendulum at Karachi (T_k) and at Murree (T_m) are related as:
A. $T_k > T_m$ B. $T_k < T_m$
C. $T_k = T_m$ D. $2T_k = 3T_m$
- xii. Which one of the following factors has no effect on the speed of sound in a gas?
A. Humidity B. Pressure
C. Temperature D. Density
- xiii. Which one of the following properties is NOT exhibited by the longitudinal waves?
A. Reflection B. Interference
C. Diffraction D. Polarization
- xiv. The tip of a needle does NOT give a sharp image. It is due to
A. Polarization B. Interference
C. Diffraction D. Reflection
- xv. The Principle of Michelson Interferometer is based on the division
A. Wave front B. Amplitude
C. Frequency D. Speed of light
- xvi. In an isothermal change, internal energy of a system:
A. Decreases
B. Increases
C. Becomes Zero
D. Remains Constant
- xvii. Triple point of water is:
A. 273.16°F B. 372.16°K
C. 273.16°C D. 273.16°K