

Instructions:

- Please attempt Section-A on the MCOs Answer Sheet only.
- Only black ball point or marker may be used for shading the relevant circle.
- Please make sure that there is no cutting, over writing, erasing, or multiple circles shading.

Time Allowed: 20 Minutes"Section - A"Marks: 12

Q.1. Choose the correct option i.e A, B, C or D.

- If the length of the pendulum become doubled then its time period becomes _____ times.

(A) $\frac{1}{\sqrt{2}}$ (B) $\sqrt{2}$ (C) $\sqrt[3]{2}$ (D) None
- Human ear cannot hear the sound having frequency greater than _____

(A) 20Hz (B) 2000Hz (C) 20,000 Hz (D) None
- The human eye forms the image of an object at its _____.

(A) Iris (B) Pupil (C) Cornea (D) Retina
- The phenomenon of total internal reflection is used in transmission of signal through.

(A) Electric wire (B) Optical fibers (C) Radio (D) None
- Origin of energy from the sun and stars is.

(A) Fission (B) Fusion (C) Radioactivity (D) None
- An echo occurs when sound wave is _____.

(A) Absorbed (B) Reflected (C) Retracted (D) Transmitted
- The magnification of a refracting telescope is $M_Q =$ _____.

(A) $f_o + f_e$ (B) $f_o - f_e$ (C) $-\frac{f_o}{f_e}$ (D) $-\frac{f_e}{f_o}$
- The equivalent capacitance of a capacitors is always greater than their individual capacitance when they are connected in.

(A) Series (B) Parallel (C) Separate (D) None
- One kilowatt hour (1kwh) = _____.

(A) $3.6 \times 10^6 J$ (B) 1000J (C) $3.6 \times 10^3 J$ (D) 0.36hr
- A convex lens with focal length 8 cm has the power of lens.

(A) 2.05D (B) 4D (C) 12.5D (D) 16D
- A step up transformer increases _____.

(A) Power (B) Energy (C) Current (D) Voltage
- The Boolean equation for "AND" gate is.

(A) $A.B$ (B) $A+B$ (C) $\overline{A+B}$ (D) $\overline{A.B}$