

NOTE: There are three sections of this paper. Carefully read the instructions for each section and attempt accordingly. Attempt all questions of Section-A and return it to the Superintendent within given time, even if you have not attempted any question. No marks will be awarded for cutting/erasing/overwriting.

SECTION-ATime Allowed: **25** Minutes

Max. Marks: 12

1. There are four possible answers (A, B, C, D) for each question. Select the correct one and write it in the answer box.
- The time period of simple pendulum depend on: [A] length, B) mass, C) temperature, D) amplitude]
 - The intensity of sound depends on: [A] amplitude, B) frequency, C) surface area, D) all these].....
 - Which one is not the application of ultrasonics? [A] sonor, B) breaking kidney stone, C) quality control, D) resonance]
 - In reflection process the angle of incidence is 30° . The angle of reflection will be: [A] 10° , B) 30° , C) 45° , D) 60°].....
 - The refraction index of diamond is 2.42. The critical angle for diamond is: [A] 20° , B) 24° , C) 30° , D) 45°].....
 - The ratio of the size of image to the size of object is called: [A] magnification, B) resonance, C) damping, D) total internal reflection]
 - The unit of electric current is ampere which is equal to: [A] coulomb/meter, B) coulomb/volt, C) coulomb/second, D) coulomb/ohm].....
 - The equivalent resistance of $R_1=2\Omega$ and $R_2=3\Omega$ connected in series are: [A] 2Ω , B) 3Ω , C) 4Ω , D) 5Ω].....
 - A bar magnet is cut in the middle. There appears on the cut ends: [A] two like poles, B) two opposite poles, C) single pole, D) no poles].....
 - Beta particles is actually emitted by a nucleus. [A] proton, B) neutron, C) electron, D) deuteron]
 - Silicon become p-type by doping with element. [A] divalent, B) trivalent, C) tetravalent, D) pentavalent].....
 - The output unit of computer is: [A] keyboard, B) mouse, C) CPU, D) monitor].....