

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].....