10th Class 2021

Physics	Group-II	Paper-II
Time: 15 Minutes	(Objective Type)	Max. Marks: 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1- Which of the gate is used to convert one logic level into opposite logic level?

    (a) AND gate   (b) OR gate

    (c) NOR gate   (d) NOT gate ✓

2- How will be electric lines of force where intensity of electric field is maximum?

    (a) Wider   (b) +ve to –ve

    (c) Narrow ✓   (d) –ve to +ve

3- If the current in a wire which is placed perpendicular to a magnetic field increases, the force on the wire:

    (a) Will be zero   (b) Remains the same

    (c) Decreases   (d) Increases ✓

4- In which state of matter longitudinal waves move faster?

    (a) Liquid   (b) Solid ✓

    (c) Gas   (d) Liquid and gas

5- Isotopes of hydrogen are:

    (a) 2   (b) 3 ✓

    (c) 4   (d) 5

6- Speed of sound in hydrogen at 0°C is:

    (a) $1290 \ ms^{-1}$ ✓   (b) $972 \ ms^{-1}$

    (c) $1498 \ ms^{-1}$ (d) $317 \ ms^{-1}$

7. Which of these is not a web browser?
   (a) Youtube ✓   (b) Chrome
   (c) Mozilla firefox   (d) Safari

8. The refractive index of medium is equal to:
   (a) $n = \dfrac{1}{cv}$ (b) $n = \dfrac{v}{c}$

   (c) $n = cv$ (d) $n = \dfrac{c}{v}$ ✓

9. The image formed by convex mirror is:
   (a) Real and erect   (b) Inverted and real ✓
   (c) Erect and virtual   (d) Inverted and virtual

10. One micro ampere is equal to:
    (a) $10^{-3}A$ (b) 10^{-6A} ✓
    (c) 10^{-9A} (d) 10^{-12A}

11. According to Coulomb's law, what happens to force of attraction of two oppositely charged objects as their distance of separation increases:
    (a) Decreases ✓
    (b) Increases
    (c) Remains unchanged
    (d) Cannot be determined

12. In parallel combination of resistors, each resistor will have the same:
    (a) Resistance   (b) Voltage and current
    (c) Voltage ✓   (d) Current