

10th Class 2020

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- **On what principle circuit breaker works?**
- (a) Electromagnet ✓
 - (b) Electric potential
 - (c) Self-induction
 - (d) Mutual induction
- 2- **Which of the following is not processing?**
- (a) Arranging ✓
 - (b) Manipulating
 - (c) Calculating
 - (d) Gathering
- 3- **The speed of light in glass is:**
- (a) $3 \times 10^8 \text{ ms}^{-1}$
 - (b) $2.3 \times 10^8 \text{ ms}^{-1}$
 - (c) $2 \times 10^8 \text{ ms}^{-1}$ ✓
 - (d) $1.5 \times 10^8 \text{ ms}^{-1}$
- 4- **The output of NAND gate is zero:**
- (a) $A = 0$ and $B = 0$
 - (b) $A = 1$ and $B = 1$ ✓
 - (c) $A = 0$ or $B = 0$
 - (d) $A = 1$ or $B = 1$

- 5- Which one is not radioactive element?
(a) Uranium (b) Polonium
(c) Thorium (d) Sodium ✓
- 6- In a vacuum all electromagnetic waves have same:
(a) Speed ✓ (b) Frequency
(c) Amplitude (d) Wavelength
- 7- An electric current in conductor is due to flow of:
(a) Positive ion
(b) Negative ion
(c) Positive charge
(d) Free electron ✓
- 8- Which is an example of longitudinal waves?
(a) Sound waves ✓
(b) Light waves
(c) Radio waves
(d) Water waves
- 9- If current in wire, which is placed perpendicular to magnetic field increases, the force on the wire:
(a) Increases ✓
(b) Decreases
(c) Remain same
(d) Will be zero
- 10- $1 \text{ PF} = \text{---}$.
(a) 10^{-6} F (b) 10^{-9} F
(c) 10^{-12} F ✓ (d) 10^{-3} F

- 11- The unit of power of lens is:
- (a) Meter (b) Diopter ✓
(c) Hertz (d) Volt
- 12- The particles emitted from a hot cathode surface are:

- (a) Positive ion (b) Negative ion
(c) Protons (d) Electrons ✓

