

## PHYSICS PAPER-II (OLD SCHEME)

TIME ALLOWED: 20 Minutes

## GROUP-II

OBJECTIVE

MAXIMUM MARKS: 17

**Note:** You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

## Q.No.1

- (1) The relation  $B = \frac{\mu_0 I}{2\pi r}$  is called:-  
 (A) Lenz's law (B) Gauss's law (C) Ampere's law (D) Faraday's law
- (2) The energy stored in an inductor is:-  
 (A)  $LI^2$  (B)  $\frac{1}{2}LI^2$  (C)  $\frac{1}{2}L^2 I$  (D)  $IL^2$
- (3) Frequency of A.C. in Pakistan is:-  
 (A) 100 cps (B) 60 cps (C) 120 cps (D) 50 cps
- (4) If  $V_o$  is the peak value of alternating voltage, the rms value is:-  
 (A)  $\frac{V_o}{\sqrt{2}}$  (B)  $\sqrt{2}V_o$  (C)  $V_o/2$  (D)  $\frac{\sqrt{2}}{V_o}$
- (5) The phase at the positive peak is:-  
 (A)  $\pi$  (B)  $\frac{\pi}{2}$  (C)  $\frac{3\pi}{2}$  (D)  $2\pi$
- (6)  $Nm^{-2}$  is called:-  
 (A) Ohm (B) Ampere (C) Volt (D) Pascal
- (7) The number of valance electrons in *Ge* are:-  
 (A) 3 (B) 4 (C) 5 (D) 2
- (8) In a bridge rectifier circuit, the number of diodes are:-  
 (A) 4 (B) 2 (C) 3 (D) 1
- (9) If an object moves with the speed of light, its mass becomes:-  
 (A) Equal to its rest mass (B) Double of its rest mass (C) Four times of its rest mass (D) Infinite
- (10) The magnitude of Plank's constant is:-  
 (A)  $8.85 \times 10^{-19} J.S$  (B)  $6.63 \times 10^{-34} J.S$  (C)  $6.62 \times 10^{-19} J.S$  (D)  $0.53 \times 10^{-10} J.S$
- (11) The energy of the 4<sup>th</sup> orbit in Hydrogen atom is:-  
 (A)  $-2.51 eV$  (B)  $-3.50 eV$  (C)  $-13.6 eV$  (D)  $-0.85 eV$
- (12) During the Fission of one atom of  $U_{92}^{235}$ , the energy released is:-  
 (A) 200 MeV (B) 100 MeV (C) 60 MeV (D) 28 MeV
- (13) Thyroid cancer is cured by:-  
 (A) Carbon – 14 (B) Sodium – 24 (C) Iodine – 131 (D) Cesium – 137
- (14) The electric intensity at infinite distance from the point charge is:-  
 (A) Zero (B)  $1 NC^{-1}$  (C)  $1 \text{ volt} - m^{-1}$  (D) Infinite
- (15) Electric flux  $\Phi = \vec{B} \cdot \vec{A}$  is maximum when ' $\theta$ ' is:-  
 (A)  $90^\circ$  (B)  $45^\circ$  (C)  $30^\circ$  (D)  $0^\circ$
- (16) Ohm's law is mathematically expressed as:-  
 (A)  $I = \frac{R}{V}$  (B)  $I = \frac{V}{R}$  (C)  $I = RV$  (D)  $I = RV^2$
- (17) The SI unit of magnetic induction is:-  
 (A) Weber (B) Gauss (C) Tesla (D) Tesla .  $m^2$