CUET 2026 May 20 Shift 2 Physics

Question Paper (Memory-Based)

Conducted by National Testing Agency (NTA)

General Instructions

(i) The examination will be conducted in Computer-Based Test (CBT) mode.

(ii) Each question carries +5 marks for correct answer and -1 mark for wrong answer.

(iii) The total number of questions are 50.

(iv) Duration of the exam is 1 hour (60 minutes).

1. In an AC circuit, the rms value of current is 5 A. The peak current is:

(A) 3.54 A

(B) 5 A

(C) 7.07 A

(D) 10 A

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2. A capacitor of capacitance 50 μF is connected to an AC source of frequency 50 Hz. The capacitive reactance is approximately:

(A) 31.8 Ω

(B) 63.7 Ω

(C) 95.5 Ω

(D) 127.4 Ω

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3. In Young's Double Slit Experiment, if the wavelength of light used is doubled while keeping all other quantities constant, the fringe width becomes:

(A) Half

(B) Double

(C) Four times

(D) Unchanged

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4. In wave optics, diffraction becomes more prominent when:

(A) Aperture size is much larger than wavelength

(B) Aperture size is equal to or smaller than wavelength

(C) Frequency is very high

(D) Light intensity is increased

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5. Two long parallel wires carrying currents in the same direction will:

(A) Repel each other

(B) Attract each other

(C) Produce no force

(D) Rotate about each other

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6. The ratio of electric field amplitudes and magnetic field amplitudes in an electromagnetic wave in vacuum is equal to:

(A) Speed of light

(B) Planck's constant

(C) Gravitational constant

(D) Permittivity of vacuum

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7. Electromagnetic waves are:

(A) Longitudinal in nature

(B) Mechanical waves

(C) Transverse waves

(D) Stationary waves

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8. In photoelectric effect, the stopping potential depends upon:

(A) Intensity of incident light

(B) Frequency of incident light

(C) Distance from source

(D) Area of metal surface

9. Light of wavelength 400 nm falls on a metal surface. The energy of one photon is approximately:

$$\left(h = 6.63 \times 10^{-34}\ \text{J s}, \quad c = 3 \times 10^{8}\ \text{m/s}\right)$$

(A) 4.97×10^{-19} J

(B) 2.5×10^{-19} J

(C) 1.2×10^{-18} J

(D) 6.63×10^{-34} J

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10. In an LCR circuit at resonance:

(A) Current is minimum

(B) Impedance is maximum

(C) Current is maximum

(D) Capacitive reactance is zero
