

(Academic Sessions 2019 – 2021 to 2021 – 2023)

PHYSICS223-1st Annual-(INTER PART – II)

Time Allowed : 20 Minutes

Q.PAPER – II (Objective Type)

GROUP – I

Maximum Marks : 17

PAPER CODE = 8471

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	For which material medium, force between two charged particles is maximum :			
	(A) Ammonia	(B) Germanium	(C) Mica	(D) Teflon
2	The force between two similar unit charges separated one meter apart in air is :			
	(A) Zero	(B) One Newton	(C) $9 \times 10^9 N$	(D) $9 \times 10^{-9} N$
3	Kirchhoff's 2 nd rule is based on :			
	(A) Energy conservation	(B) Mass conservation	(C) Charge conservation	(D) Momentum conservation
4	Which one has least resistance :			
	(A) Galvanometer	(B) Ammeter	(C) Voltmeter	(D) Ohm-meter
5	A voltmeter is always connected in :			
	(A) Parallel	(B) Series	(C) Perpendicular	(D) Oblique
6	If we make magnetic field stronger the value of induced current is :			
	(A) Decreased	(B) Increased	(C) Vanishes	(D) Constant
7	The device which consume electrical energy is called :			
	(A) Generator	(B) Motor	(C) Load	(D) Dissipaters
8	At high frequency the current through a capacitor of A.C. circuit will be :			
	(A) Small	(B) Infinite	(C) Zero	(D) Large
9	A.C. through inductor, the applied voltage :			
	(A) Leads the current $\frac{\pi}{2}$	(B) Lags the current $\frac{\pi}{2}$		
	(C) In phase	(D) Out of phase 180°		
10	The crystalline structure of NaCl is :			
	(A) Trigonal	(B) Cubical	(C) Tetragonal	(D) Hexagonal
11	Minimum diode required for full wave rectifier are :			
	(A) 1	(B) 3	(C) 2	(D) 4
12	Photovoltaic cell formed from :			
	(A) Arsenic	(B) Carbon	(C) Germanium	(D) Silicon
13	Unit of Plank's constant is same as that of :			
	(A) Entropy	(B) Angular momentum	(C) Acceleration	(D) Force
14	Stefen Boltzmann Law is given by :			
	(A) $E = hf$	(B) $E = mc^2$	(C) $E = \sigma T^4$	(D) $\lambda \times T = \text{constant}$
15	Radiation produced from TV picture tube is :			
	(A) Gamma rays	(B) X-rays	(C) Infrared light	(D) β -rays
16	What is difference in isotopes :			
	(A) Number of electron	(B) Number of proton		
	(C) Charge number	(D) Number of neutron		
17	A proton consists of quark which are :			
	(A) All up	(B) One up, two down	(C) Two up, one down	(D) All down