

NAT I Computer Science Physics

Sr	Questions	Answers Choice
1	If in a moving coil galvanometer a current 1 produces a deflection θ then	A. $i \propto \tan \theta$ B. $i \propto \theta^2$ C. $i \propto \theta$ D. $i \propto \sqrt{\theta}$
2	Which of the following particle would experience the largest magnetic force when projected with the same velocity perpendicular to a magnetic field?	A. Proton B. Electron C. He^{+} D. Li^{+}
3	Shunt required in an ammeter of resistance R to decrease its deflection from 30 ampere to 10 ampere is	A. $R/4$ B. $R/3$ C. $R/2$ D. R
4	The magnetic moment of a circular coil carrying current is	A. Directly proportional to the length of the wire in the coil B. Inversely proportional to the length of the wire in the coil C. Directly proportional to the square of the length of the wire in the coil D. Inversely proportional to the square of the length of the wire in the coil
5	Choose the correct statement	A. Both an ammeter and voltmeter should have small resistance B. Both an ammeter and a voltmeter should have large resistance C. An ammeter should have large resistance and a voltmeter should have small resistance D. An ammeter should have small resistance and a voltmeter should have large resistance
6	A moving charge will gain energy due to the application of	A. Electric field B. Magnetic C. Both of these D. None of these
7	If a diamagnetic substance is brought near north or south pole of a bar magnet it is	A. Attracted by the poles B. Repelled by the poles C. Repelled by north pole and attracted by the south pole D. Attracted by the north pole and repelled by the south pole
8	A voltmeter has resistance of 2000 ohms and it can measure up to 2V. If we want to increase its range to 10V then required resistance in series will be	A. 2000 Ω B. 4000 Ω C. 6000 Ω D. 8000 Ω
9	In a voltmeter the conduction takes place due to	A. Electrons only B. Holes only C. Electrons and holes D. Electrons and ions
10	A conducting wire is drawn to double its length Final resistivity of the material will be	A. Double of the original one B. Half of the original one C. One-fourth of the original one D. Same as original one