MDCAT Physics Chapter 10 Current Electricity MCQ's Test

Sr	Questions	Answers Choice
1	If a source of emf is traversed from positive to negative the potential change will be:	A. Positive B. Negative C. Zero D. Constant
2	A charge is 90C passes through a wire in 1 hour and 15 minutes. Wat is the current in the wire?	A. 10mA B. 20mA C. 15mA D. 25mA
3	The rate at which the battery is supplying the electrical energy is the:	A. Power output B. Electrical power C. Power input D. Both A and C
4	Electric current is defined as:	A. Flow of charges through conductor B. Rate of flow of charges through conductor C. Flow of electrons D. Flow of protons
5	A cell of negligible resistance and e.m.f 2 V is connected across a series combination of 2,3 and 5 ohms. The p.d. across the 3 Ω resistor is	A. 0.6 V B. 1/3 V C. 2/3 V D. 4/3 V
6	A steady current is flowing in a conductor of non-uniform cross-section. Thecharge passing through any cross-section per unit time is	A. Directly proportional to the area of cross-section B. Inversely proportional to the area of cross-section C. Proportional to square of the area of cross-section D. Independent of the area of cross-section
7	A piece of Aluminium (Al) and a piece of Germanium (Ge) are cooled T1 K to T2 K. The resistance of:	A. Each of them increases B. Each of them decreases C. Al increases and Ge decreases D. Al decreases and that of Ge increases
8	Resistance of 60 watt bulbs in 120V line is:	A. 20 ohms B. 240 ohms C. 0.15 ohms D. 180 ohms
9	The product of resistance and conductance of a resistors is equal to:	A. 1 B. Conductivity C. Resistivity D. Zero
10	Two wires of same material have lengths L and 2L and cross-sectional area 4A and A respectively. the ratio of their specific resistance would be:	A. 1: 1 B. 1: 8 C. 8: 1 D. 1: 2
11	A 100W, 220V bulb is operated on a 110V line, the power consumed is:	A. 25W B. 75W C. 50W D. 100W
12	A total charge of 100C flows through 12W bulb in a time of 50 second. Which is the potential difference across the bulb during this time?	A. 0.12V B. 6.0V C. 2.0V D. 24V
13	There are two electric bulbs of 40 W and 100 W. They are first connected in series and then in parallel across a source:	A. 40W bulb will be brighter in series and 100W in parallel B. 100W bulb will be brighter in series and 40W in parallel C. 40W bulb will be brighter in both the cares D. 100W bulb will be brighter in both the cares

14	When resistances are connected in Parallel, the effective resistance will be	A. Product of the reciprocals of the individual resistances B. Product of the individual resistances C. Sum of the reciprocals of the individual resistances D. Sum of the individual resistances
15	The 'emf ' is always even when no current is drawn through the battery of the cell:	A. Zero B. Present C. Absent D. Maximum
16	Which combination of 7 identical resistors of 3-ohm will give 12/13 ohm:	A. 3 series, 4 parallel B. 5 series, 2 parallel C. 2 series, 5 parallel D. 4 series, 3 parallel
17	An electric room radiator, which operates at 50V has resistance of 50 Ω. Power of the radiator is approximately:	A. 100W B. 50W C. 450W D. 1000W
18	The emf of a cell of negligible internal resistance is 2V. It is connected to the series combination of □□, □□ □□□ □□ resistance. The potential difference across □□ resistance will be in volt:	A. 0.6 B. 2/3 C. 3 D. 6
19	The specific resistance of a wire varies with its:	A. Length B. Cross-section C. Mass D. Material
20	Which of the Following bulb will glow Brightest?	A. 100W B. 200W C. 300W D. 400W