

## MDCAT Physics Chapter 7 Current Electricity Online Test

Sr	Questions	Answers Choice
1	A steady current is flowing in a conductor of non-uniform cross-section. The charge 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 <b>D. Independent of the area of cross-section</b>
2	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 $\Omega$ resistor is	<b>A. 0.6 V</b> B. 1/3 V C. 2/3 V D. 4/3 V
3	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 <b>C. Sum of the reciprocals of the individual resistances</b> D. Sum of the individual resistances
4	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 <b>D. 4 series, 3 parallel</b>
5	Which of the Following bulb will glow Brightest?	A. 100W B. 200W C. 300W <b>D. 400W</b>
6	The emf of a cell of negligible internal resistance is 2V. It is connected to the series combination of $\square\square$ , $\square\square$ $\square\square\square$ $\square\square$ resistance. The potential difference across $\square\square$ resistance will be in volt:	<b>A. 0.6</b> B. 2/3 C. 3 D. 6
7	A 100W, 220V bulb is operated on a 110V line, the power consumed is:	<b>A. 25W</b> B. 75W C. 50W D. 100W
8	Resistance of 60 watt bulbs in 120V line is:	A. 20 ohms <b>B. 240 ohms</b> C. 0.15 ohms D. 180 ohms
9	If a source of emf is traversed from positive to negative the potential change will be:	A. Positive <b>B. Negative</b> C. Zero D. Constant
10	A charge is 90C passes through a wire in 1 hour and 15 minutes. Wat is the current in the wire?	A. 10mA <b>B. 20mA</b> C. 15mA D. 25mA
11	Electric current is defined as:	A. Flow of charges through conductor <b>B. Rate of flow of charges through conductor</b> C. Flow of electrons D. Flow of protons
12	When the length and area of cross-section both are doubled, then its resistance:	A. Will become half <b>B. Will remain the same</b> C. Will be doubled D. Will become four times
13	The rate at which the battery is supplying the electrical energy is the:	A. Power output <b>B. Electrical power</b> C. Power input D. Both A and C
		A. Each of them increases

14	A piece of Aluminium (Al) and a piece of Germanium (Ge) are cooled T1 K to T2 K. The resistance of:	B. Each of them decreases C. Al increases and Ge decreases D. Al decreases and that of Ge increases
15	The specific resistance of a wire varies with its:	A. Length B. Cross-section C. Mass D. Material
16	The 'emf ' is always even when no current is drawn through the battery of the cell:	A. Zero B. Present C. Absent D. Maximum
17	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
18	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 cases D. 100W bulb will be brighter in both the cases
19	An electric room radiator, which operates at 50V has resistance of 50 $\Omega$ . Power of the radiator is approximately:	A. 100W B. 50W C. 450W D. 1000W
20	The product of resistance and conductance of a resistors is equal to:	A. 1 B. Conductivity C. Resistivity D. Zero