Physics ECAT Pre Engineering Chapter 12 Electrostatics

Sr	Questions	Answers Choice
1	One coulomb per second is equal to	A. One volt B. One ampere C. One hom D. One henry
2	Three resistors of resistance R each are combined in various ways. Which of the following cannot be obtained?	A. 3RΩ B. 2R/4Ω C. R/3Ω D. 2R/3Ω
3	A car battery has e.m.f 12 volt and internal resistance 5 x 10^{-2}ohm. If it draws 60 ampere current, the terminal voltage of the battery will be	A. 5 volt B. 3 volt C. 15 volt D. 9 volt
4	The charge carriers in gases are	A. electrons B. ions C. protons D. ions and electrons
5	In a charged capacitor the energy is stored in	A. Both in positive and negative charges B. Positive charges C. The edges of the capacitor plates D. The electric field between the plates
6	Two electric bulbs of 200 W and 100 W have same voltage. If $R_1$and R_2be their resistance respectively then	A. R₁= 2R₂ B. R₂= 2R₁ C. R₂=4R₁ D. R₁= 4R₂
7	An electron of charge e coulomb passes through a potential difference of V volts its energy in joules will be	A. V/e B. eV C. e/V D. V
8	The thermistors are usually made of	A. Metals with low temperature coefficient of resistivity B. Metals with high temperature coefficient of resistivity C. Metal oxides with high temperature coefficient of resistivity D. Semi conducting materials having low temperature coefficient of resistivity
9	The potential difference across each resistance in series combination is	A. same B. different C. zero D. none of these
		A. 5<span style="color: rgb(34, 34, 34); font-family: "Times New

		Roman"; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);">μF B. 10μF C. 3μF D. 6μF
10	Question Image	
11	The charge per unit time through any cross-section of a conductor is called	A. capacitance B. electric power C. current D. potential difference
12	The electric field intensity at a point due to a point charge	A. Falls off inversely as the distance B. Falls off inversely as the square of distance C. Remains unchanged with distance D. Increase directly as square of distance
13	In Pakistan electricity is supplied for domestic use at 220 V, it is supplied at 110 V in USA. If the resistance of a 60 W bulb for use in Pakistan is R, the resistance of a 60 W bulb for use in USA will be	A. 2 R B. R/4 C. R/2 D. R
14	An alpha particle is accelerated through a potential difference of 10^6volt. Its kinetic energy will be	A. 1 MeV B. 2 MeV C. 4 MeV D. 8 MeV
15	Physicist George Simon ohm was a	A. German physical B. French physicist C. Chinese physicist D. Russian physicist
16	The charge carriers in electrolyte are positive and negative	A. protons B. electrons C. ions D. none of these
17	Magnetic effect at a point caused due to flow a current depend upon the	A. Quantity of current B. Distance from current C. Both the quantity of current and distance from current element D. None of the all
18	A capacitor of capacity 1μF is charged to 1 KV. The energy stored in J	A. 5 B. 0.5 C. 0.005 D. 50
19	The graphical representation of ohm's law is	A. hyperbola B. straight line C. ellipse D. parabola
20	A piece of fuse wire melts when a current of 15 ampere flows through it. With this current. If it dissipates 22.5 W, the resistance of fuse wire will be	A. Zero B. 10Ω C. 1Ω D. 0.10Ω