

## Physics ICS Part 2 Online MCQ's Test

Sr	Questions	Answers Choice
1	A moving charge is surrounded by:	A. 2 Fields B. 3 Fields C. 4 Fields D. None of these
2	Thermosouple is an arrangement of two different metals:	A. Two convert heat energy into electrical energy B. To produce more heat C. To convert heat energy into chemical energy D. To convert electrical energy into heat energy
3	The powers of two electric bulbs are 100w and 200w. Which are connected to power supply of 220 V. The ratio of resistance of their filament will be:	A. 1 <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">":2</span> B. 2 <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">":1</span> C. 1 <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">":3</span> D. 4 <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">":3</span>
4	The resistivity of two wires is $\rho_1$ and $\rho_2$ which are connected in series. If there dimensions are same then the equivalent resistivity of the combination will be:	A. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">(<math>\rho_1 + \rho_2</math>)</span> B. <span style="font-family: arial, sans-serif; font-size: 16px; color: rgb(34, 34, 34);">(<math>\rho_1 + \rho_2</math>)</span> C. <span style="font-family: arial, sans-serif; font-size: 16px; color: rgb(34, 34, 34);">(<math>\rho_1 + \rho_2</math>)</span> D. <span style="font-family: arial, sans-serif; font-size: 16px; color: rgb(34, 34, 34);">(<math>\rho_1 + \rho_2</math>)</span>
5	A wire uniform cross-section. A length L and resistance R is cut into two equal parts. The resistivity of each part will be:	A. Doubled B. Halved C. Remain the same D. One fourth
6	When a wire is stretched and its radius becomes $r/2$ , then its resistance will be	A. 16 R B. 4 R C. 2R D. 0
7	106 electrons are moving through a wire per second the current developed is:	A. $1.6 \times 10^{-19}$ A B. 1 A C. $1.6 \times 10^{-13}$ A D. 106 A
8	Calculate current in 2 2R /4Ω resistor.	A. 1 A B. 2R /4Ω C. R/3Ω D. 2R /3Ω

9	Three resistors of resistance $R$ each are combined in various ways, Which of the following cannot be obtained?	A. $3R$ B. $2R/4$ C. $R/3$ D. $2R/3$
10	Seven resistances are connected as shown in the figures . The equivalent resistance between A and B is:	A. $3\Omega$ B. $4\Omega$ C. $4.5\Omega$ D. $5\Omega$
11	Two parallel, metal plates are a distance 8.00 m apart. The electric field between the plates is uniform, Directed toward the right , and has a magnitude of 4.00 N/C. If an ion of charge $+2e$ is released at rest at the left-hand plate. What is its kinetic energy when reaches the right-hand plate?	A. 4 eV B. 64 eV C. 32 eV D. 16 eV
12	The electric field in some region of space is uniform in magnitude and direction. Which one of the following five statements best describes the volume charge density ( $\rho$ ) , in this region of space?	A. $\rho = 0$ B. $\rho$ decreases linearly in the direction of the electric field C. $\rho$ increases linearly in the direction of the electric field D. $\rho$ has a uniform value throughout the region E. 
13	A one microfarad capacitor of a TV is subjected to 4000 V potential difference. The energy stored in capacitor is:	A. 8 J B. 16 J C. $4 \times 10^{-3}$ J D. $2 \times 10^{-3}$ J
14	A capacitor is charged with a battery and then it is disconnected. A slab of dielectric is now inserted between the plates, Then	A. The charge in the plates reduces and potential difference increase B. Potential difference between the plates increase, stored energy decreases and charge remains the same C. Potential difference between the plates decreases, stored energy decreases and charge remains unchanged D. None of them
15	A proton is about 1840 time than an electron. When it is accelerated by a potential difference of 1 kV, its kinetic energy will be:	A. 1884 keV B. 1/1840 keV C. 1 keV D. 920 keV
16	Electric potential of earth is taken to be zero because the earth is good:	A. Semiconductor B. Conductor C. Insulator D. Dielectric
17	Some charge is being given to a conductor. Then its potential	A. Its maximum at surface B. Its maximum at its maximum at center C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre