Physics ICS Part 2 Online MCQ's Test

Sr	Questions	Answers Choice
1	Two oppositely charged balls A and B attract the third ball C, when placed near them turn by turn The third ball C must be.	A. Positively charged B. Negatively charged C. Electrically neutral D. Positively and negatively charged
2	the force between two charge is 28 N. If paraffin wax of relative permittivity 2.8 is introduced between the charges as medium, then the force reduces to.	A. 25 N B. 20 N C. 10 N D. 15 N
3	If both the magnitude of charges and distance between them is doubled, then coulomb's force will be.	A. Doubled B. Hlaf C. Remain same D. One fourth
4	If the distance between the two charged bodies is halved, the force between them becomes.	A. Double B. Half C. Four times D. One times
5	The electrostatic force between two charges is 42 N, If we place a dielectric of E_y=2.1 between the charges then the force become equal to.	A. 42 N B. 88.2 N C. 20 N D. 2 N
6	The SI unit of relative permittivity is.	A. Fm-1 B. C2N-1m-2 C. Nm2C-2 D. No unit
7	The electrons in one coulomb change is equal to.	A. 1.6 x 10⁻¹⁹ B. 2.25 x 10⁻¹⁹ C. 6.25 x 10⁻¹⁸ D. 6.25 x 10⁻¹⁹
8	For which material medium, force between two charged particles is maximum.	A. Ammonia B. Germanium C. Mica D. Teflon
9	If the medium between the charges is not free space then electrostatic force will.be	A. Increase B. Decrease C. Remain same D. None of these
10	Bottom quark carries charge :	A. 2/3 e B. -2/3 e C. +1/3 e D. -1 /3 e
11	Which of the following basic force is able to provide an attraction between two neutrons:	A. Electrostatic and nuclear b B. Electrostatic and gravitational C. Gravitational and strong nuclear D. Only nuclear force
12	Unit of decay constantλ is:	A. ms B. m⁻¹ C. m D. S⁻¹
13	Unit of decay constantλ is:	A. ms B. m⁻¹ C. m D. S⁻¹
14	Gamma radiations are emitted due to:	A. De-excitation of atom B. De-excitation of nucleus C. Excitation of atom D. Excitation of nucleus
15	A radio active substance has a half life of four months. 3 -fourth of the substance will decay in:	A. 6 months B. 8 months C. 12 months D. 16 months

16	The radio active nuclide $_{86}Ra^{228}$ decays by a series of emissions of three alpha particles and one beta particle. The nuclide X finally formed is:	A. ₆₄X²²⁰ B. ₈₆X²²² C. ₈₄X²¹⁶ D. ₈₈X²¹⁵
17	The energy equivalent of 1 kg of matter is about:	A. 10⁻¹⁵ J B. 1 J C. 10⁻¹²J D. 10⁻¹⁷J