Atomic and Nuclear Physics

Sr	Questions	Answers Choice
1	The current which does not change its direction is called:	A. A.C<o:p></o:p> B. D.C<o:p></o:p> C. Conventional<o:p></o:p> D. Transient current<o:p></o:p>
2	Total energy supplied in driving one coulomb of charge around a complete circuit is called:	A. Potential<o:p></o:p> B. Potential difference<o:p></o:p> C. Electromotive force<o:p></o:p> D. Potential energy<o:p></o:p>
3	Safe limit of radiations exposure in one year.	A. 4 rem B. 5 rem C. 3 rem D. 6 rem
4	Which element is used to locate the ulcer in brain?	A. Iodine-131 B. Phosphorus-32 C. Carbon-14 D. Potassium-40
5	When a uranium (92 protons) ejects a beta particle, how many protons are left in the remaining nucleus?	A. 92 protons B. 91 protons C. 93 protons D. 89 protons
6	When 1 kg of Uranium -235 is fused then energy released is	A. 67 x 10¹⁰ J B. 67 x 10⁷J C. 67 J D. 7 J
7	When a heavy nucleus splits into lighter nuclei,the process would.	A. Release nuclear energy B. absorb nuclear energy C. Release Chemical energy D. Absorb Chemical Energy
8	What is the power rating of a lamp connector to a 12 V source when it carries 2.5 A:	A. 4.8W<o:p></o:p> B. 14.5W<o:p></o:p> C. 30W<o:p></o:p> D. 60W<o:p></o:p>
9	with the increase in temperature the resistance of pure metals:	A. increases<o:p></o:p> B. decreases<o:p></o:p> C. remains same<o:p></o:p> D. none of these<o:p></o:p>
10	Which element is used for the monitoring of thyroid glands?	A. Iodine- 131 B. Phosphorus-32 C. Carbon-14 D. Potassium-40
11	As the temperature of a conductor rises, its resistance:	A. Increases<o:p></o:p> B. Increases<o:p></o:p> C. Decreases<o:p></o:p> D. Does not change<o:p></o:p>

		E. None of these<o:p></o:p>
12	the range of galvanometer to measure current is:	A. few amperes<o:p></o:p> B. few micro amperes<o:p></o:p> C. few milli amperes<o:p></o:p> D. mega amperes<o:p></o:p>
13	The half of carbon 14 is	A. 5720 years B. 5730 years C. 5740 years D. 5750 years
14	isotopes are atom of same element with different.	A. Atomic mass B. Atomic number C. Number of proton D. Number of electron
15	Radioactive isotopes present in atmosphere is	A. Cobalt -60 B. Ph-32 C. Carbon -14 D. Carbon -20
16	The number of neutrons in the nucleus of tritium is:	A. 1 B. 2 C. 3 D. 4
17	Joule's law is W=	A. IR/t<o:p></o:p> B. IRt²<o:p></o:p> C. IR²t<o:p></o:p> D. I²Rt<o:p></o:p>
18	The half life of argon nuclide Ar-40 is:	A. 2 x 10⁸years B. 2 .2x 10⁸years C. 2.4x 10⁸years D. 2.8x 10⁸years
19	The property of substance, which opposes the flow of current through it is called:	A. Resistance<o:p></o:p> B. Reactance<o:p></o:p> C. Resistivity<o:p></o:p> D. None<o:p></o:p>
20	the resistance of an ammeter should be:	A. high<o:p></o:p> B. very high<o:p></o:p> C. low<o:p></o:p> D. constant<o:p></o:p>