Atomic and Nuclear Physics

Sr	Questions	Answers Choice
1	The equivalent resistance of a parallel combination is:	A. Equal to sum of all resistance<o:p></o:p> B. Is greater than the largest resistance of combination<o:p></o:p> C. Is smaller than the smallest resistance of combination<o:p></o:p> D. All of these<o:p></o:p>
2	How Galvanometer is connected in circuit to detect current:	A. In series<o:p></o:p> B. In parallel<o:p></o:p> C. Fixed<o:p></o:p> D. Variable<o:p></o:p>
3	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>
4	in a dry cell, chemical energy changes into:	A. mechanical energy<o:p></o:p> B. electrical energy<o:p></o:p> C. potential energy<o:p></o:p> D. kinetic energy<o:p></o:p>
5	battery is one of the source of:	A. heat<o:p></o:p> B. light<o:p></o:p> C. current<o:p></o:p> D. sound<o:p></o:p>
6	The combined resistance of two identical resistors, connected in series is 8Ω. Their combined resistance in a parallel arrangement will be:	A. 2 Ω<o:p></o:p> B. 4 Ω<o:p></o:p> C. 8 Ω<o:p></o:p> D. 12 Ω<o:p></o:p>
7	A thermistor is a dependent resistors:	A. Heat<o:p></o:p> B. temperature<o:p></o:p> C. energy<o:p></o:p> D. mass<o:p></o:p>
8	What happen to the atomic number of an element which emits one alpha particle?	A. Increase by 1 B. Stays the same C. Decrease by 2 D. Decrease by 1
9	diamond des not conduct electricity, because it has no:	A. free electrons<o:p></o:p> B. free protons<o:p></o:p>

		C. free neutrons<o:p></o:p> D. free positive charge<o:p></o:p>
10	What happen to the atomic number of an element which emits one alpha particle and a beta particles.	A. Increases by 1 B. Stay the same C. Decrease by 2 D. Decrease by 1
11	When a potential of 10 volt is applied across a conductor, a current of 5 miliampere flows through it, the resistance of the conductor will be:	A. 200 ohm<o:p></o:p> B. 2000 ohm<o:p></o:p> C. 0.2 ohm<o:p></o:p> D. 0.002 ohm<o:p></o:p>
12	for which of following ampere second could be the unit:	A. energy<o:p></o:p> B. current<o:p></o:p> C. charge<o:p></o:p> D. power<o:p></o:p>
13	The half life of radium - 226 is 1620 years. If N is its total amount then after the four half lives, its left amount will be:	A. 1/2 N B. 1/4 N C. 1/8 N D. 1/16 N
14	If we double both the current and the voltage in a circuit while keeping its resistance constant, the power:	A. Remains unchanged<o:p></o:p> B. Halves<o:p></o:p> C. Doubles<o:p></o:p> D. Four time<o:p></o:p>
15	For observing how fast plants are absorbing phosphate fertilizer we use.	A. I.131 B. Ph -32 C. Co-60 D. Ar-40
16	Release of energy by the sun is due to	A. Nuclear fission B. Nuclear fusion C. Burning of gases D. Chemical reaction
17	A digital multimeter is used to measure:	A. Current<o:p></o:p> B. Resistance<o:p></o:p> C. Potential difference<o:p></o:p> D. All of above<o:p></o:p>
18	According to ohm's law V= :	A. I²R<o:p></o:p> B. IR²<o:p></o:p> C. IR<o:p></o:p> D. I/R<o:p></o:p>
19	Which element is used to locate the ulcer in brain?	A. Iodine-131 B. Phosphorus-32 C. Carbon-14 D. Potassium-40
20	The temperature at the centre of sun is.	A. 10 million k B. 20 million k C. 30 million k D. 35 million k