

Energetics

Sr	Questions	Answers Choice
1	Bond dissociation for H ₂ is	A. 435 kJ/mol B. 440 kJ/mol C. 430 kJ/mol D. 445 kJ/mol
2	Bond formation energy of one O-H bond is.....	A. 488 kJ/mol B. 484 kJ/mol C. 486 kJ/mol D. 489 kJ/mol
3	The enthalpy of reaction H ₂ +I ₂ --- 2HI	A. -571.6 kJ B. +53.8 kJ C. 11 kJ D. -393.5 kJ
4	Activation energy of a chemical reaction must be..... the average kinetic energy of reacting molecules.	A. Equal to B. Greater than C. Lower than D. None of these
5	When new bonds are formed, the energy is	A. Consume B. Remain same C. Release D. None of these
6	Washing clothes at 140 °F uses almost the energy as at 140 °F wash	A. Half B. Thrice C. Twice D. None of the above
7	Who used the word energy for the 1st time	A. Rutherford B. Bohr C. Thomas Young D. None of these
8	During the glycolysis net ATP produced are.	A. 2 B. 4 C. 6 D. 8
9	If the Delta H value is negative then reaction will be	A. Endothermic B. Exothermic C. May or may not be exothermic or endothermic D. None of these
10	When old bonds are broken, the energy is.	A. Release B. Remain same C. Consume D. None of these
11	-----acts as reserve energy sources.	A. Enzymes B. Vitamins C. Proteins D. Lipids
12	----- of the energy used by traditional electric bulb is wasted in producing heat.	A. 60% B. 50% C. 70% D. 90%
13	----- acts as a catalyst promoting the breakdown of ozone.	A. I ₂ B. Br ₂ C. Cl₂ D. None
14	The word energy is used in physics for the first time.	A. 1902 B. 1858 C. 1805 D. 1802
15	All chemical reaction involves.	A. Enzymes B. Catalyst C. Energy changes D. All of the above

D. All of these

16 When NaOH and HCl are mixed the temperature increases. The reaction

- A. Exothermic with a negative enthalpy change.
- B. Endothermic with a positive enthalpy change.
- C. Endothermic with a negative enthalpy change
- D. Exothermic with a positive enthalpy change

17 Formation of NO is

- A. Exothermic
- B. Endothermic
- C. No Heat Change
- D. None of these

18 The enthalpy of reaction $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$

- A. -571.6 kJ
- B. -110.5 kJ
- C. -393.5 kJ
- D. +53.8 kJ

19 Which is not produced in an aerobic respiration.

- A. Carbon dioxide
- B. Lactic acid
- C. Water
- D. Energy

20 The enthalpy of reaction $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$

- A. -571.6 kJ
- B. -393.5 kJ
- C. +53.8 kJ
- D. -110.5 kJ