EXERCISE # 1

SUBJECTIVE QUESTIONS

Q.1 Compare and contrast fossil fuels and the Sun as direct sources of energy.

Q.2 Compare and contrast bio-mass and hydro electricity as sources of energy.

Q.3 What are the limitations of extracting energy from -
(a) the wind? (b) waves? (c) tides?

Q.4 On what basis would you classify energy sources as
(a) renewable and non-renewable?
(b) exhaustible and inexhaustible?
Are the options given in (a) and (b) the same?

Q.5 What are the qualities of an ideal source of energy?

Q.6 What are the advantages and disadvantages of using a solar cooker? Are there places where solar cookers would have limited utility?

Q.7 What are the environmental consequences of the increasing demand for energy? What steps would you suggest to reduce energy consumption?

EXERCISE # 2

Single Correct Answer type Questions

Q.1 A solar water heater cannot be used to get hot water on
(A) a sunny day. (B) a cloudy day.
(C) a hot day. (D) a windy day.

Q.2 Which of the following is not an example of a bio-mass energy source?
(A) wood (B) *gobar-gas*
(C) nuclear energy (D) coal

Q.3 Most of the sources of energy we use represent stored solar energy. Which of the following is not ultimately derived from the Sun's energy?
(A) geothermal energy
(B) wind energy
(C) nuclear energy
(D) bio-mass.

Q.4 The device in which the nuclear fission and release of energy is controlled is known as-
(A) Thermopile (B) Thermostat
(C) Nuclear reactor (D) Cloud chamber

Q.5 For a sustained chain reaction, the reproduction factor should be -
(A) zero (B) one
(C) two (D) three

Q.6 Moderator is used in nuclear reactor for -
(A) slowing neutrons
(B) accelerating neutrons
(C) stopping neutrons
(D) heating the neutrons

Q.7 The fusion reactions occur at-
(A) low pressure
(B) low temperature
(C) extremely high temperature
(D) high temperature and low pressures

Q.8 The source of energy of the sun is-
(A) Nuclear fission
(B) Chemical reaction
(C) Nuclear fusion
(D) None of these

Q.9 The number of neutrons in an atom X of atomic number Z and mass number A is-
(A) Zero (B) Z
(C) A – Z (D) A

Q.10 When a beta particle is given out, the atomic number of the parent atom -
(A) Increases by unity
(B) Decreases by unity
(C) Remains the same
(D) Is halved

Q.11 Which of the following has least penetrating power ?
(A) Alpha particles
(B) Gamma rays
(C) Beta particles
(D) All have the same penetrating power

ANSWER KEY

EXERCISE-2

Ques	1	2	3	4	5	6	7	8	9	10	11
Ans	B	C	C	C	B	A	C	C	C	A	A