



Q1(A) Write the correct alternative :

(5)

- (1) is the largest organization engaged in environmental activities.
a) BNHS c) UNEP
b) WWF d) Green Peace
- (2) At the end of glycolysis molecules are obtained.
a) glucose c) citrate
b) pyruvate d) phosphoglycerate
- (3) Pollen grains are formed by division in locules of anthers.
a) meiotic c) mitotic
b) both (a) and (b) d) either meiotic or mitotic
- (4) The solar lamp uses the energy.
a) heat c) wind
b) light d) sound
- (5) Vestigial organ present in human body is proof of evolution.
a) Gradual development c) Appendix
b) Gene d) Ribosome

(B) Answer the following questions as per the given instructions :

(5)
(1)

- (1) Fill in the blank and rewrite the completed statements
Our muscle cells perform _____ type of respiration during exercise.

- (2) Match the pair

(1)

Column "A"	Column "B"	Column "C"
1. Coal	a. Potential energy	i. Wind electricity plant
2. Uranium	b. Kinetic energy	ii. Hydroelectric plant
	c. Nuclear energy	iii. Thermal plant
	d. Thermal energy	iv. Nuclear power plant

- (3) Name the following
Rewrite the food-chain given below with correct sequence.
Grasshopper – Snake – Paddy field – Eagle – Frog

(1)

- (4) Find co-related terms
XY : Boy :: XX : _____

(1)

- (5) State true or false (1)
Study of fossils is an important aspect of study of evolution.

Q2(A) Give scientific reasons (any two) : (4)

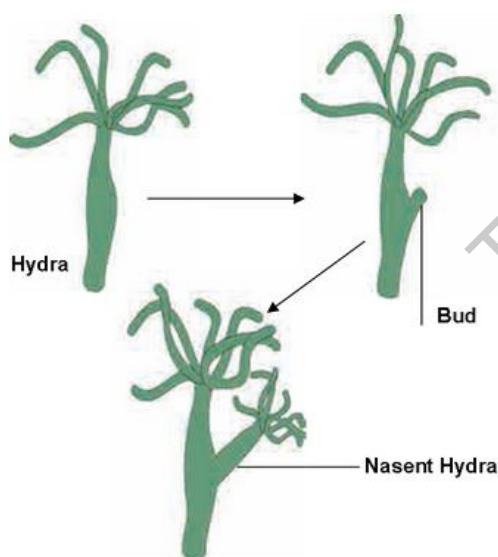
- (1) Saving energy is the need of the hour.
- (2) The flow of energy in the ecosystem is unidirectional.
- (3) Fibers are one of the important nutrients.

(B) Answer the following (any three) : (6)

- (1) (1) What is environment?
(2) What is included in environment?
- (2) What are advantages of solar energy?
- (3) In which way is science of heredity useful these days?
- (4) What is the relationship between cell division and the formation of new organisms of the same species by an earlier existing organism?
- (5) Explain the difference between Mitosis and Meiosis.

Q3) Answer the following (any five) : (15)

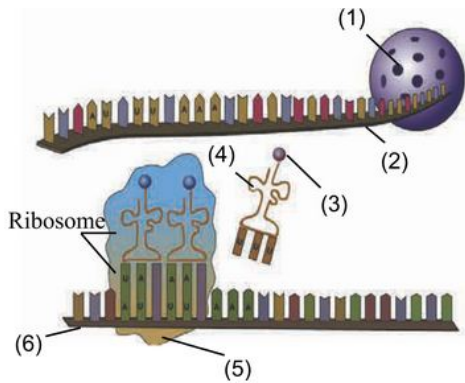
- (1) Explain the diagram given below.



- (2) Paddy is cultivated on large scale in various states of South India. Paddy fields are frequently attacked by grasshoppers. Similarly, frogs are also present in large number in the mud of paddy fields, to feed upon grasshoppers and snakes are also present therein to feed upon their favorite food-frogs.
- (1) What will be the effect on paddy field, if the frog population declines ?
 - (2) If the frog population declines, number of which consumers will decline and which will increase ?
 - (3) What will be overall effect on that ecosystem ?
- (3) Explain in brief -
- i. Lamarck's principle of 'use or disuse of organs'.
 - ii. Give two examples.
- (4) (i) Which are the components of the DNA molecule?
(ii) Which are the different organs in body of organisms?
(iii) Is each of the organs useful to organism?

(5) Which are the reasons for endangering the many species of plants and animals ? How can we save those ?

(6) Draw and label the diagram:



(7) (i) Which are the components of the DNA molecule?

(ii) Which are the different organs in body of organisms?

(iii) Is each of the organs useful to organism?

(8) Fill in the blanks and explain the statements.

For formation of plasma membrane, molecules are necessary.

Q4) Answer any one of the following :

(5)

(1) Explain with diagram step-by-step energy conversion in nuclear power plant.

(2) Explain asexual reproduction in plants.

All the Best