

**Q.1 (A) Multiple Choice Questions.**

**(5)**

- 1) Citric acid used in production of beverages, toffees, chocolates is obtained by fermentation of .....  
by aspergillus niger.  
i. Grapes      ii. Sugar molasses      iii. Apple      iv. Coffee nuts
- 2) Body organization of ..... animals is referred as 'Protoplasmic grade' organization.  
a. unicellular      b. multicellular      c. higher chordates      d. lower non-chordates
- 3) Speed of the wind turbine will depend on -  
a. energy      b. momentum      c. velocity      d. blade size
- 4) Which of the following is the factor affecting social health -  
a. Financial Status      b. Social safety      c. Social treatment      d. All of the above
- 5) What should be done if the gas cylinder at your home catches fire?  
a. Water should be sprinkled.  
b. Sand, soil should be put at it.  
c. Cylinder should be covered with wet blanket.  
d. One should run away.

**(B) Solve the following questions.**

**(5)**

**1) Find co-related terms**

Manas sanctuary : Assam :: Sunderban sanctuary : .....

**2) Find the odd one out.**

Energy by nuclear fission, Energy by charcoal, Energy by wind, Energy by Sunlight

**3) Match the pair.**

	Column "A"		Column "B"		Column "C"
i.	Phylum-Chordata	a.	Animals in phylum Hemichordata-Saccoglossus	1.	Larvae metamorphose into adults
ii.	Phylum-Mollusca	b.	Animals in Sub-phylum Urochordata-herdmania	2.	Notochord present in probosis
		c.	Animals in phylum Platyhelminthes-Liverfluke	3.	Soft and slimy body
		d.	Animals in phylum Mollusca- snail	4.	Flat-worms

**4) State true or false.**

Excess of proteins is converted into glucose through the process of gluconeogenesis.

**5) Name the following.**

The largest phylum is animal kingdom.

**Q.2 A) Give scientific reason. (Any two)**

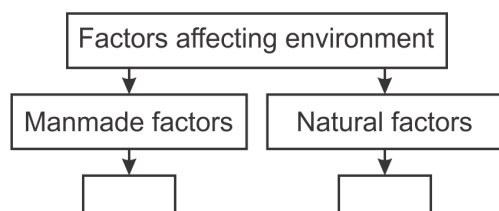
**(4)**

- 1) Multicellular organisms show complex ways of reproduction.
- 2) Burning of natural gas results in less pollution than coal combustion.
- 3) Natural selection is not the only factor responsible for evolution.

**B) Solve the following questions. (Any three)**

**(6)**

**1) Complete the chart**



**2) Distinguish Between**

Pisciculture and Aquaculture

- 3) Name scientists who discovered process of glycolysis :
- 4) What are the limitations of solar energy?
- 5) Write short note on Modern Landfill site with diagram.

**Q.3 Solve the following questions. (Any five)**

**(15)**

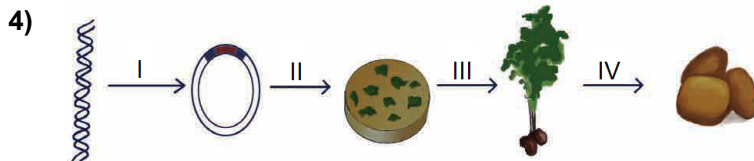
- 1)
  - i. What is cell division ?
  - ii. Which type of cell division occurs in somatic cells of the body ?
  - iii. Where does meiosis occur in the body ?

	<b>ASEXUAL REPRODUCTION</b>	<b>SEXUAL REPRODUCTION</b>
i.	Reproduction that occurs with the help of somatic cells is called as asexual reproduction	.....
ii.	.....	Male and female parent are necessary for sexual reproduction.
iii.	This reproduction occurs with the help of mitosis only.	.....
iv.	.....	New individual formed by this method is genetically different from parents.
v.	Asexual reproduction occurs in different individuals by various methods like binary fission, multiple fission, budding,	.....

fragmentation, regeneration, vegetative propagation, spore production, etc.

- 3) Complete the paragraph:  
**(eucoelomate, pseudocoelomates, embryonic, coelom, mesoderm or gut, acoelomate, Aschelminthes)**

Cavity between the body and internal organs is called as body cavity/coelom. In case of multicellular animals, during initial period of their ..... development, body cavity is formed from either ..... Such type of body cavity is present in animals of phylum Annelida and all phyla coming after Annelida. Such animals are called as ..... (animals with true body cavity). Body cavity is absent in case of animals from phyla Porifera, Cnidaria and Platyhelminthes. Such animals are called as ..... In case of animals from phylum ....., they have body cavity but it is not formed by the above mentioned two ways. Hence those animals are called as .....

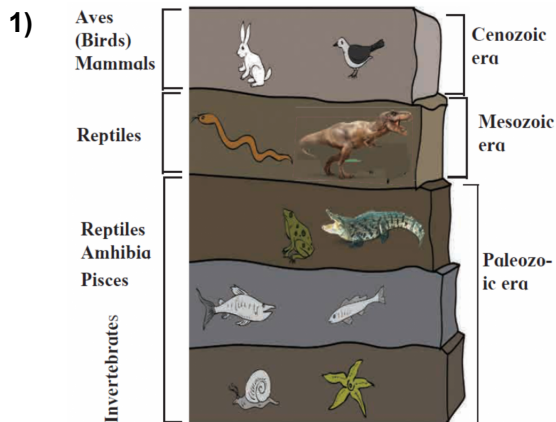


- A. Which process is shown in the above figure?  
 B. Describe in brief the steps- I, II, III & IV.

- 5) Explain in brief the sensitive issues of general public about disaster?  
 6) How will you justify that overcoming the pollution is a powerful way of environmental management?  
 7) Suggest the remedies for the following situation:  
 1. What will you do if your brother studying in class XII has developed the stress?  
 2. How will you help to maintain good atmosphere chronically ill old person?  
 8) Bread and other products produced with the help of yeast become nutritive.

**Q.4 Solve the following questions. (Any one)**

**(5)**



- i. What are invertebrates ?  
 ii. Give any two examples of the organisms precisely found in Mesozoic era.  
 iii. .... group refers to aquatic animals.  
 iv. What are the remnants of the buried animals called as ?  
 v. Why are the Invertebrates shown in the deepest layers of Earth ?

2) Explain in detail the process mentioned in the diagram.

