

**Time: 2 hours****Activity Sheet – July 2024****Marks: 40**

- Note:**
- (i) All questions are compulsory.
  - (ii) Use of calculator is not allowed.
  - (iii) The numbers to the right of the questions indicate full marks.
  - (iv) In case of MCQs [Q. No. 1.(A)], only the first attempt will be evaluated and will be given credit.
  - (v) For each MCQ, the correct alternative - a, b, c, or d - with sub question number is to be written as an answer. For e.g., i. a, ii. b, iii. c.
  - (vi) Scientifically correct, labelled diagrams should be drawn wherever necessary.

**Q.1. (A) Choose the correct alternative.****[5]**

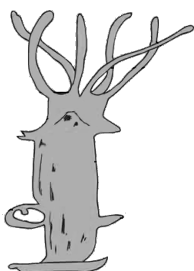
- i. Evolution means \_\_\_\_\_.
  - a. Internal change
  - b. Gradual change
  - c. External change
  - d. Quick change
- ii. One of the rare species is \_\_\_\_\_.
  - a. Lesser florican
  - b. Red panda
  - c. Tiger
  - d. Shekhru
- iii. The machine which converts the kinetic energy of wind to electrical energy is called \_\_\_\_\_.
  - a. Solar cell
  - b. Thermal
  - c. Generator
  - d. Wind turbine
- iv. Chemically, vinegar is \_\_\_\_\_.
  - a. Acetic acid
  - b. Amino acid
  - c. Hydrochloric acid
  - d. Gluconic acid
- v. We get \_\_\_\_\_ Kcal energy per gram of proteins.
  - a. 4
  - b. 3
  - c. 2
  - d. 1

**(B) Solve the following questions.****[5]**

- i. Find the odd one out.  
Starfish, Snail, Frog, Amoeba
- ii. Match the correct pairs.

Column A	Column B
(1) Biotic components	(a) Soil
	(b) Plant
	(c) Sunlight

- iii. Write the correlation.  
White revolution : Dairy : : Blue revolution : \_\_\_\_\_.
- iv. Observe the diagram and identify the phylum.



- v. State whether the given statement is right or wrong.  
Peer group influence is stronger in case of adolescents.

**Q.2. (A) Give scientific reasons. (Any two)****[4]**

- i. Fibres are one of the important nutrients.
- ii. Though tortoise lives on land as well as in water, it cannot be included in class Amphibia.
- iii. Hydroelectric energy, solar energy, and wind energy are called renewable energies.

**(B) Answer the following questions. (Any three)****[6]**

- i. Write down four benefits of Biotechnology.
- ii. Distinguish between Sexual reproduction and Asexual reproduction.

iii. Observe the following diagrams and complete the table.



Fig. A  
Disaster

Precaution

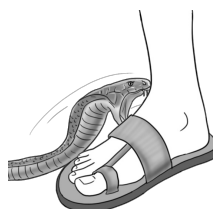


Fig. B  
Snake Bite

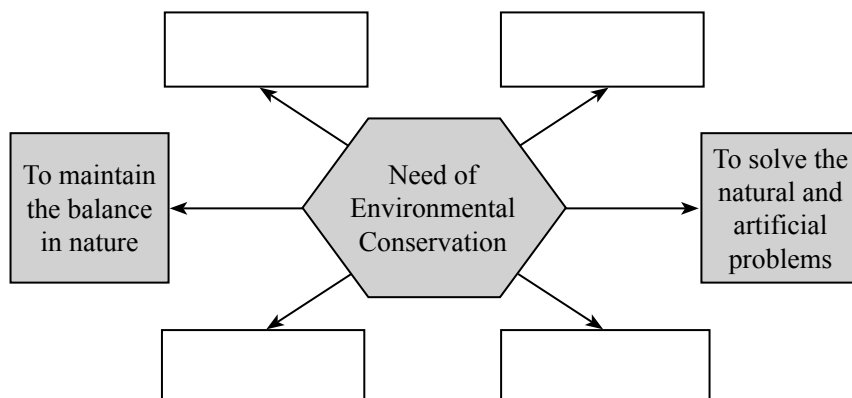
Primary help

(1)

(2)

iv. Write down any two features of Industrial Microbiology.

v. Complete the following flowchart.

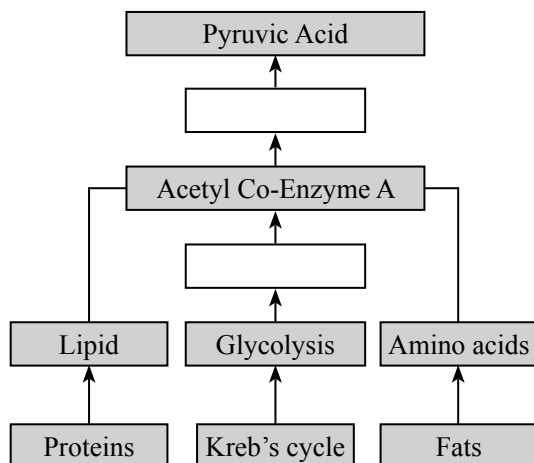


**Q.3. Answer the following questions. (Any five)**

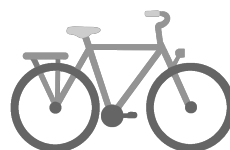
**[15]**

- i. Write any three characteristic features of class 'Aves'.
- ii.
  - a. What are vestigial organs?
  - b. Write names of *two* vestigial organs in human body.
  - c. Write the names of animals in whom some vestigial organs of human body are functional. Give two examples.

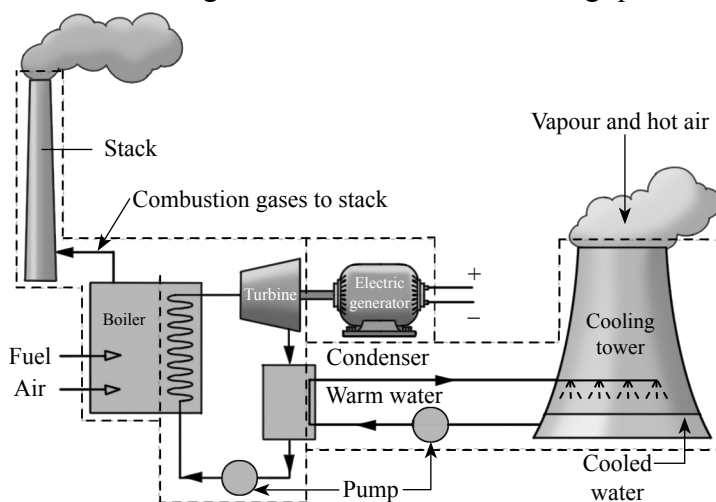
- Correct the diagram given below.



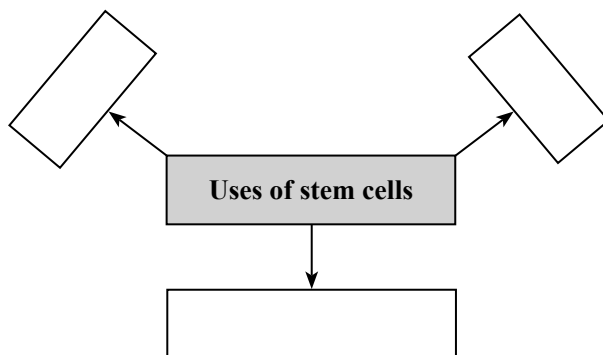
- iv. What is the meaning of the following symbols? Write your role accordingly.



- v. Observe the diagram and answer the following questions.



- a. Which type of energy is created in the above diagram?
  - b. Which type of fuel is used in the power plant?
  - c. State *one* problem created in such type of power plant.
- vi. Explain the importance of Biopesticides in organic farming.
- vii. Complete the following conceptual picture and write its uses in the treatment of various diseases.



- viii. Which are the three objectives of disaster management?

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

**[5]**

- i.
  - a. Draw a well-labelled diagram of female reproductive system.
  - b. Which type of hormones are secreted in female reproductive system?
  - c. When does menopause period stop?
  - d. How many ovaries are there in female foetus at the time of birth?
- ii. Give two examples of each.
  - a. Hobbies to reduce stress
  - b. Diseases endangering social health
  - c. Physical problems arising due to excessive use of mobile phones
  - d. Activities under the jurisdiction of cyber crime laws
  - e. Write problems due to alcoholism

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