

Maharashtra State Board
Class X Science and Technology Part-II
Question Paper Set-2

TIME: 2 HRS.

MAX MARKS: 40

Instructions:

1. All questions are compulsory.
2. Sketch well-labelled scientific diagrams wherever necessary.
3. Solve each main question on separate page.
4. Figures to the right indicate 'marks'.
5. Only first attempt will be evaluated for each multiple choice question (Q.1B).
6. Answer to each multiple choice question should be written with correct option.

Ex. i. a).....ii. c).....

Que1 A) Attempt the following.

5

- i. Survival of fittest : Darwin : : Acquired characters :
- ii. Why the bryophytes are called as amphibians of kingdom plantae?
- iii. Identify the odd. Stigma, Style, Pollen, Ovary.
- iv. What are stem cells?
- v. State whether true or false– Flow of nutrients in an ecosystem is unidirectional.

Que 1. B) Write the correct option from the given multiple options to each question. 5

i. We getenergy from carbohydrates.

- a) 9 kcal / gm b) 9 cal / gm c) 4cal / gm d) 4 kcal / gm

ii. Which of the following is not the source of green energy?

- a) Wind. b) Natural gas. c) Sunlight. d) Fossil fuel.

iii. Vegetative propagation is performed with the help ofin sweet potato.

- a) root b)stem c) leaf d) flower.

iv. Which of the following vitamin is necessary for synthesis of NADH_2 ?

- a) Vitamin B_2 b) Vitamin B_5 c) Vitamin C d) Vitamin K

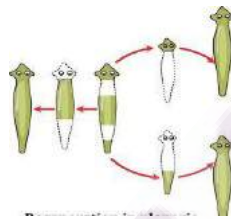
v. Maximum effect of alcohol occurs on system.

- a) nervous b) excretory c) respiratory d) muscular

Que 2. Attempt the following (Any five)

10

1. Write the forms to which following food materials are converted after digestion.
i. Milk ii. Potato. iii. Oil. iv. Chapati
2. Sketch and label the diagram showing self- and cross-pollination.
3. If a piece of bread is kept in a container in moist place for 2 – 3 days,
 - i. What will you see?
 - ii. Write scientific name and a character of the organism you may observe.
4. Observe the following picture and describe the type of reproduction shown in.



5. Write any two points of differences between flat worms and round worms.
6. Explain the meanings of 'symbols A' & 'B'.



'A'



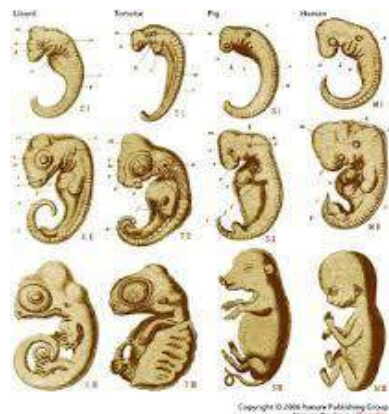
'B'

7. Which businesses will you start near the agro-tourism center?

Que. 3. Attempt the following (Any five)

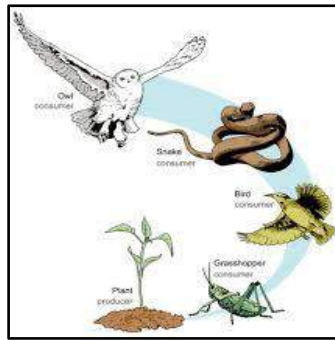
15

1. Observe the picture and answer the following questions.
 - A) Which evidence of evolution is shown in the picture?
 - B) What can be proven with this proof?
 - C) Give one more example of evidence of evolution



2. Write six strategies implemented by you for conservation of environment.

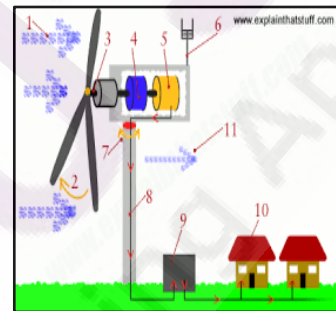
3. What is shown in the picture? Write name and trophic level of each component.



4. Sketch and label human female reproductive system. Is the woman responsible for sex-determination of child? Justify your answer.

5. Answer the questions with the help of picture.

- Which type of energy is produced?
- This power plant is based on which energy source?
- Is this power plant eco-friendly? How?



6. How the excessive use of social media and technology is proving harmful?

7. Where and in which forms the amino acids formed after digestion of food are used in the body?

Que. 4. Attempt the following. (Any one) 5

1.



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

2. Observe the images 'A' & 'B' and answer the following questions.



- Which disasters are shown in the images?
- Which primary precautions will you take in case of disaster shown in 'A'?
- Which type of first-aid is offered to the injured peoples in disaster 'B'?