

BOARD QUESTION PAPER: MARCH 2022

Science and Technology Part - 2

Time: 2 Hours

Max Marks: 40

- Note:** i. All questions are compulsory.
ii. Use of a 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), (D) with subquestion number is to be written as an answer.
For Eg: (i) (A), (ii) (B), (iii) (C)
vi. Scientifically correct, labelled diagrams should be drawn wherever necessary.

Q.1. (A) Write the correct alternative: [5]

- i. Bones contain _____ amino acids.
(A) Melanin (B) Haemoglobin
(C) Ossein (D) Insulin
- ii. Giant squirrel is an example of _____ threatened species.
(A) Endangered (B) Rare
(C) Vulnerable (D) Indeterminate
- iii. Human being belongs to _____ class.
(A) Mammalia (B) Amphibia
(C) Reptilia (D) Cyclostomata
- iv. Organs like _____ can be donated after death.
(A) Skin (B) Heart
(C) Lungs (D) Bones
- v. Volcano is a _____ disaster.
(A) Social (B) Political
(C) Biological (D) Geological

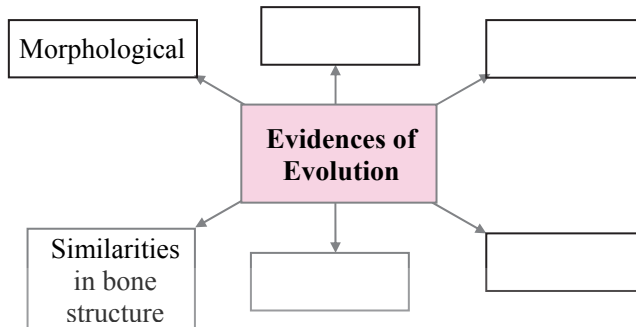
(B) Answer the following: [5]

- i. Find the odd one out:
Earthquake, Flooding, Tsunami, War
- ii. State true or false:
Oxidation of proteins is carried out in aerobic respiration.
- iii. Complete the correlation:
Western ghat : Asiatic lion : : Sunderban sanctuary : _____
- iv. Which type of fuel is used in thermal power plant?
- v. Identify the picture and name it.



- Q.2. (A) Give scientific reasons (any two):** [4]
- Cell division is one of the important properties of cell and organisms.
 - Cockroach belongs to phylum Arthropoda.
 - Power generation plant based on natural gas is eco-friendly.

- (B) Answer the following (any three):** [6]
- Complete the following diagram:

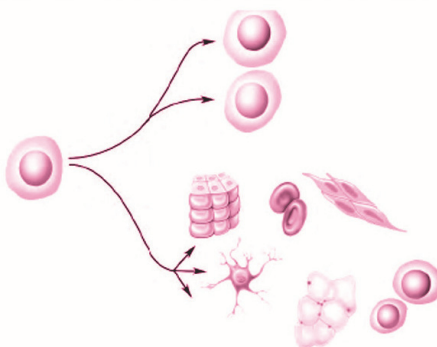


- What do we learn from the story of Jadav Molai Payeng?
- Distinguish between sexual reproduction and asexual reproduction. (two points)
- Define genetically modified crops and give any two examples.
- What are vitamins? Write two types of vitamins.

- Q.3. Answer the following (any five):** [15]
- Explain the meanings of the following symbols:

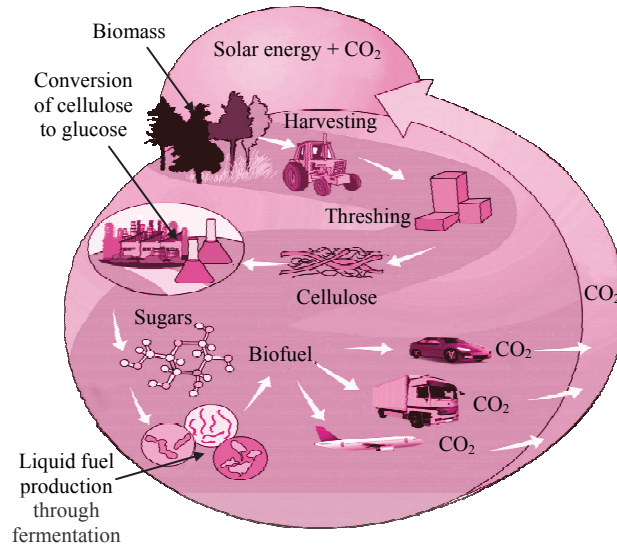


- Write any three characteristics of class reptilia.
- Which substance is used to produce cheese?
 - Which enzyme was used earlier for cheese production?
 - Which enzyme is used to produce vegetarian cheese?
- Which process is shown in the given diagram?
 - What is the importance of this process?
 - Which organs can be transplanted by this process?



- What is meant by disaster? Write any two examples of each natural and man-made disaster.
- Write the objections raised against Darwin's theory of natural selection.

vii.



- (1) Which process is shown in the above given picture?
- (2) Give *two* examples for liquid fuels and solid fuels obtained by this process.

vi. (1) Complete the stages in electric generator using wind energy.



- (2) Write limitations in an electric generator using wind energy.

Q.4. Answer any *one* of the following:

[5]

- i.
 - a. Sketch and label the essential and accessory whorls of flower.
 - b. What is pollination?
 - c. Give any *two* examples of agents of pollination.
- ii. What will you do?
 - (1) You are spending more time on internet.
 - (2) Child of your neighbour is addicted to tobacco chewing.
 - (3) Your sister has become incommunicative.
 - (4) You have to use free space around your home for good purpose.
 - (5) Your brother studying in XII has developed the stress.