



BOARD QUESTION PAPER: MARCH 2022

Science and Technology Part - 2

Time: 2 Hours

Max Marks: 40

- Note:**
- All questions are compulsory.
 - Use of a calculator is not allowed.
 - The numbers to the right of the questions indicate full marks.
 - In case of MCQs (Q. No. 1(A)) only the first attempt will be evaluated and will be given credit.
 - 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)
 - Scientifically correct, labelled diagrams should be drawn wherever necessary.

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

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

(B) Answer the following: [5]

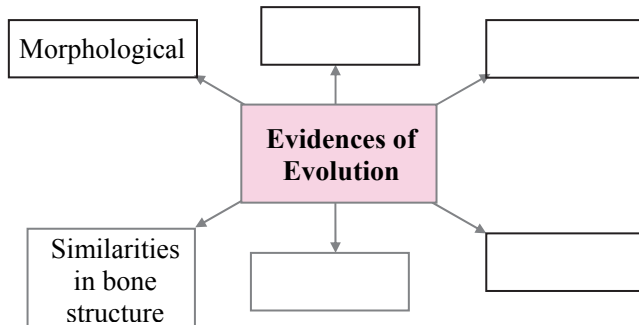
- Find the odd one out:
Earthquake, Flooding, Tsunami, War
- State true or false:
Oxidation of proteins is carried out in aerobic respiration.
- Complete the correlation:
Western ghat : Asiatic lion : : Sunderban sanctuary : _____
- Which type of fuel is used in thermal power plant?
- Identify the picture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





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

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



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

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

(1)



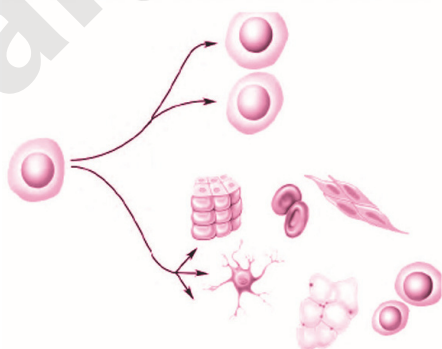
(2)



(3)

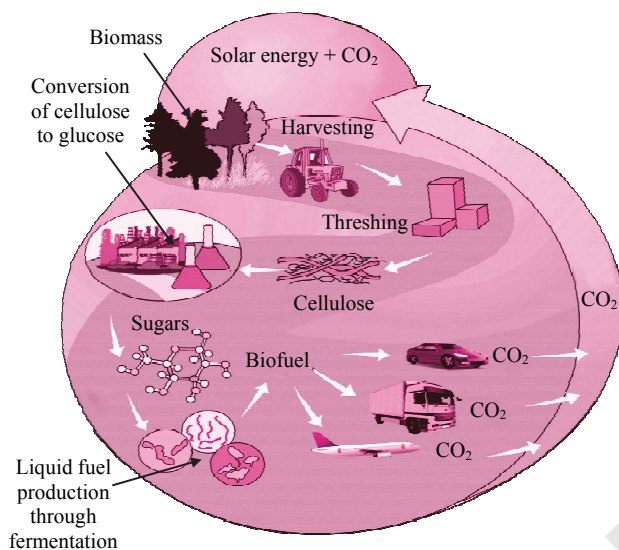


- ii. Write any three characteristics of class reptilia.
- iii.
 - (1) Which substance is used to produce cheese?
 - (2) Which enzyme was used earlier for cheese production?
 - (3) Which enzyme is used to produce vegetarian cheese?
- iv.
 - (1) Which process is shown in the given diagram?
 - (2) What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



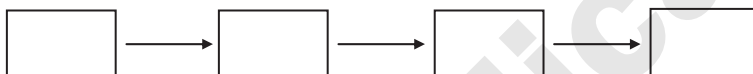
- v. What is meant by disaster? Write any two examples of each natural and man-made disaster.
- vi. Write the objections raised against Darwin's theory of natural selection.

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.