

Newton's Academy

Science 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

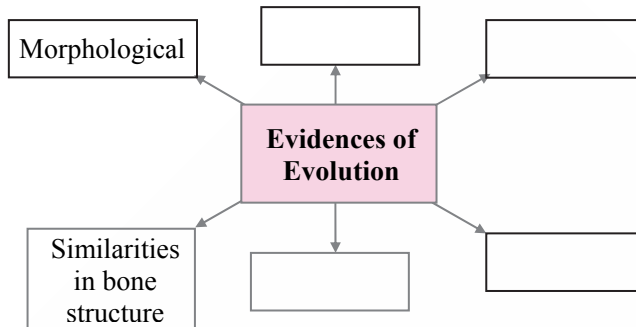
(B) Answer the following: [5]

- 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:

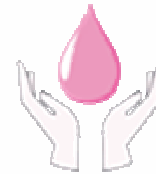
(1)



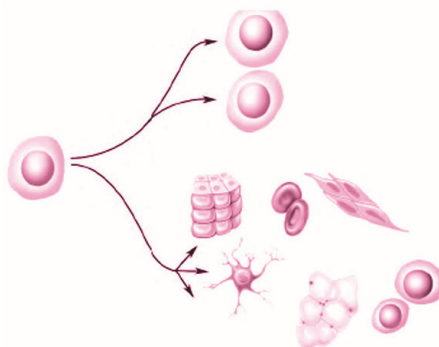
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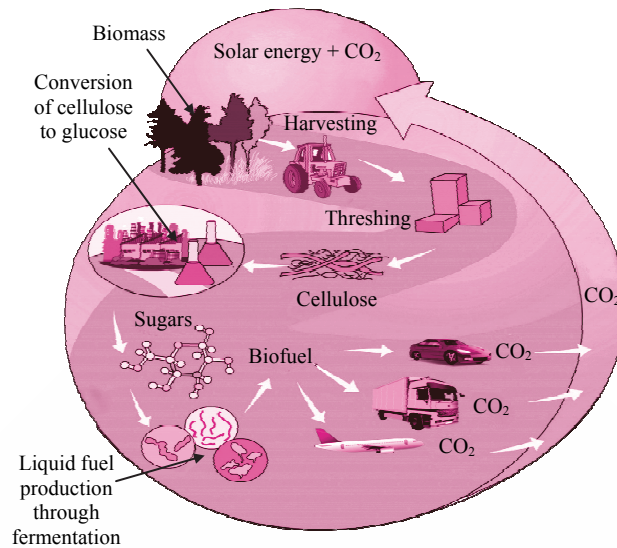


- Write any three characteristics of class reptilia.
- Which substance is used to produce cheese?
 - Which enzyme was used earlier for cheese production?
 - Which enzyme is used to produce vegetarian cheese?
- Which process is shown in the given diagram?
 - What is the importance of this process?
 -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