

N 744

Seat No.

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2022 III 30 1030 – N 744 – SCIENCE AND TECHNOLOGY (72) – PART II (E)

(REVISED COURSE)

Time : 2 Hours

(Pages 11)

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.

P.T.O.

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

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(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

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(v) Volcano is a disaster.

- (A) Social
- (B) Political
- (C) Biological
- (D) Geological

(B) Answer the following :

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(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 ?

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(v) Identify the picture and name it.



2. (A) Give scientific reasons (any two) :

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(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.

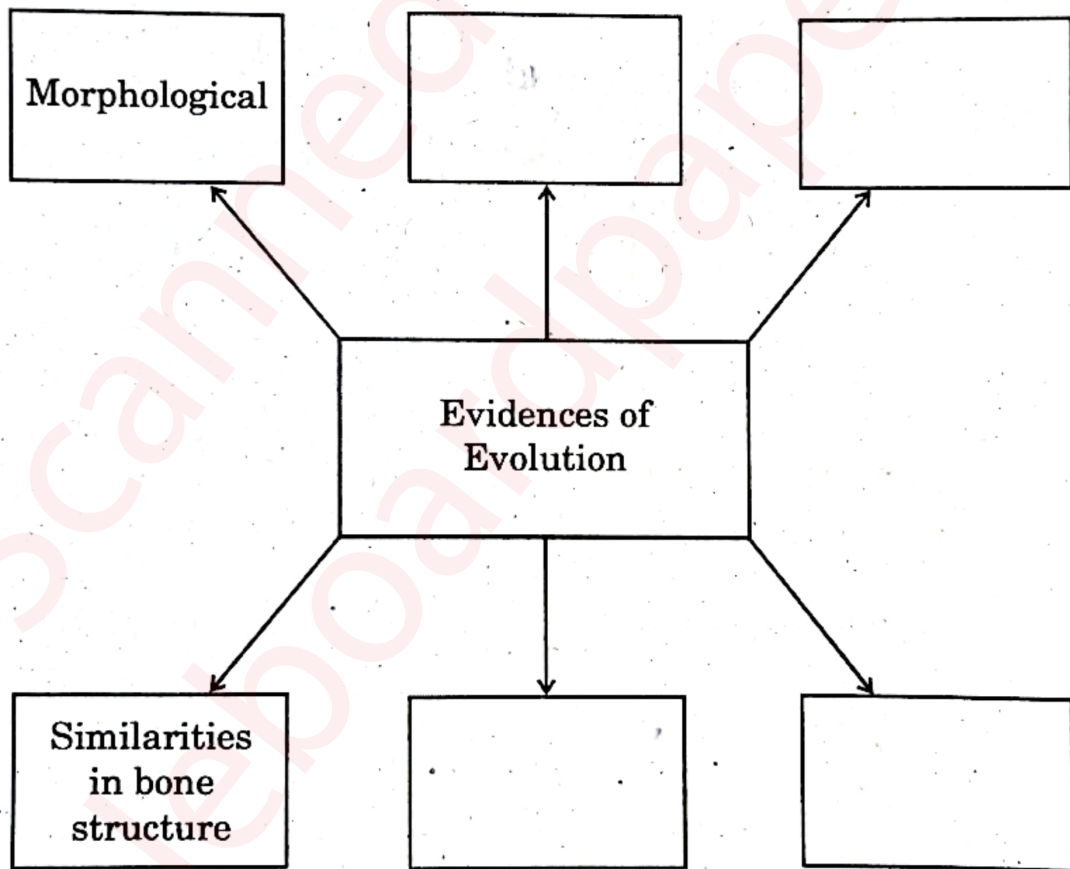
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(B) Answer the following (any three) :

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(i) Complete the following diagram :



(ii) What do we learn from the story of Jadav Molai

Payeng ?

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- (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.

3. Answer the following (any *five*) :

15

- (i) Explain the meanings of the following symbols :

(1)



(2)



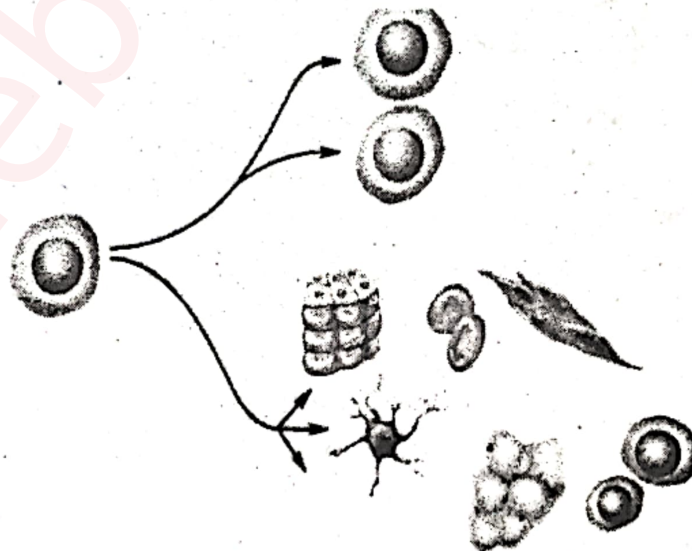
(3)



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- (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 ?

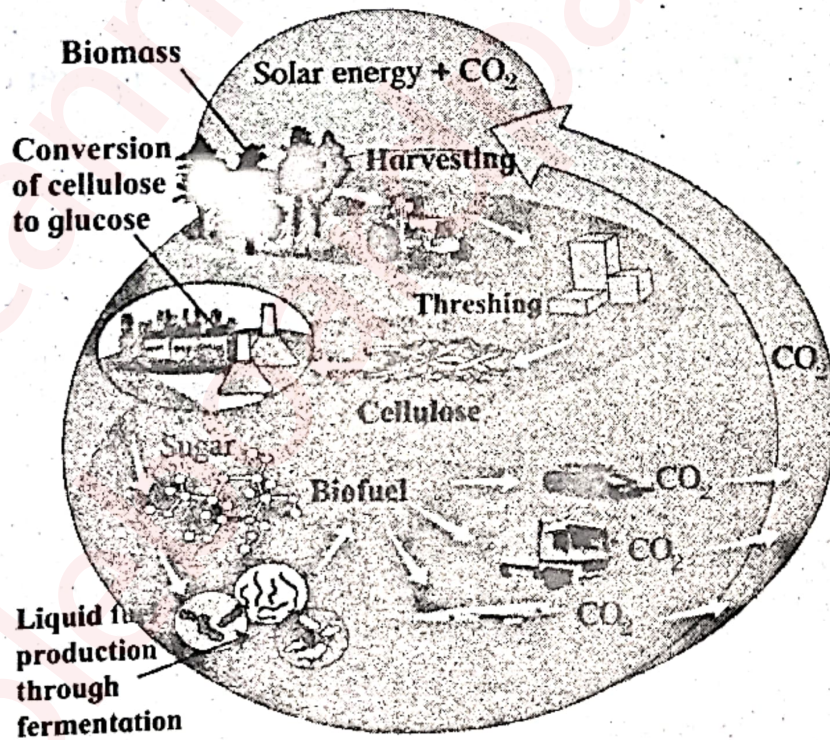


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(v) What is meant by disaster ? Write any *two* examples of each natural and man-made disaster.

(vi) Write the objections raised against Darwin's theory of natural selection.

(vii)



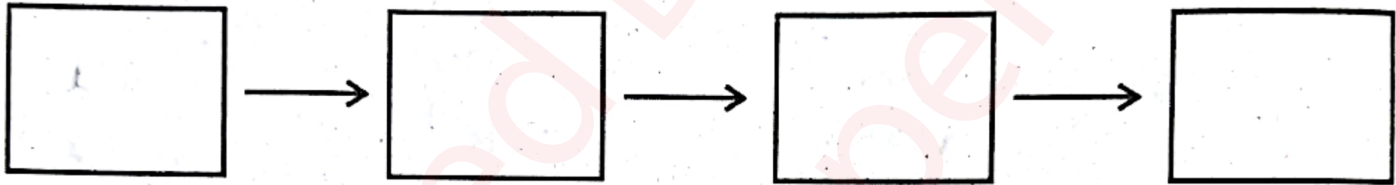
(1) Which process is shown in the above given picture ?

(2) Give *two* examples for liquid fuels and solid fuels obtained by this process.

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



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

4. Answer any *one* of the following :

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- (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.

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(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.