

DATE : 25/06/2026 **SUBJECT : SCIENCE & TECHNOLOGY (72) PART II (E)**

TIME : 11.00 SYLLABUS : (REVISED COURSE)

DURATION : 2 Hours

TOTAL PAGES : 4

TOTAL MARKS : 40

- Note :—**
- (i) All questions are compulsory.
 - (ii) The numbers to the right of the questions indicate full marks.
 - (iii) In case of MCQs [Q. No. 1(A)] only the first attempt will be evaluated and will be given credit.
 - (iv) Scientifically and technically correct, labelled diagrams should be drawn wherever necessary.
 - (v) Each new question should be started on the new page.

1. (A) Choose the correct alternative :**5**

- (i) Flipper of whale is type of evidence of evolution.
 - (a) Connecting link
 - (b) Anatomical
 - (c) Embryological
 - (d) Palaeontological
- (ii) In humans, chromosome is responsible for maleness.
 - (a) X
 - (b) Y
 - (c) XY
 - (d) XX
- (iii) Harmful bacteria like in the intestine are destroyed due to probiotics.
 - (a) Lactobacillus
 - (b) Clostridium
 - (c) Geobacter
 - (d) Pseudomonas
- (iv) Laughter Club is remedy to drive away
 - (a) Cancer
 - (b) Diabetes
 - (c) Heart attack
 - (d) Mental stress
- (v) Srishailam in Andhra Pradesh has energy power plant.
 - (a) Hydroelectric
 - (b) Wind
 - (c) Thermal
 - (d) Solar

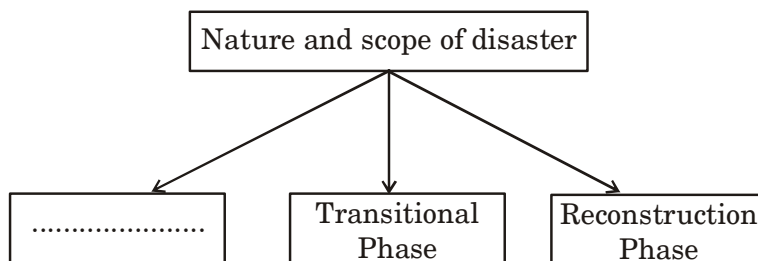
(B) Answer the following questions :**5**

- (i) Select odd man out :
Prophase, Metaphase, Anaphase, Meiosis
- (ii) Reorganize the following food chain :
Grasshopper — Snake — Paddy field — Eagle — Frog
- (iii) Identify the class of the animal shown in the given diagram.



- (iv) Complete the following correlations :
Interferon : Viral infection :: Erythropoietin :

- (v) Write the correct word in the box.



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

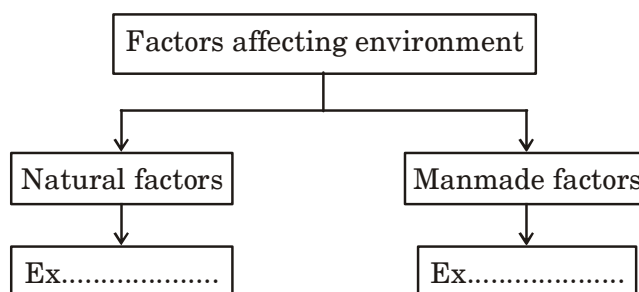
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- (i) Peripatus is connecting link between Annelida and Arthropoda.
- (ii) Our body irritates if it comes in contact with jelly fish.
- (iii) Microbial enzymes are used instead of chemical catalysts in chemical industry.

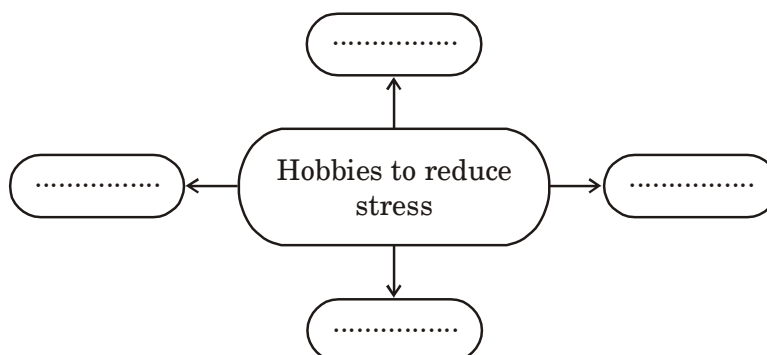
(B) Answer the following questions (any *three*) :

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- (i) Distinguish between Aerobic respiration and Anaerobic respiration.
- (ii) Complete the concept map :



- (iii) Write the correct word in the blank spaces :

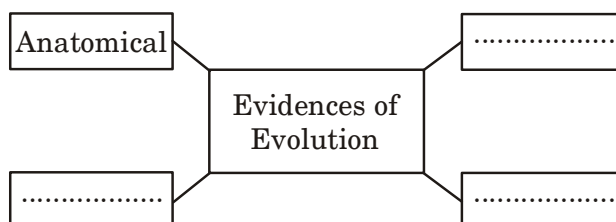


- (iv) Write any *two* objectives of disaster management.
- (v) Give *two* commercial applications of Biotechnology.

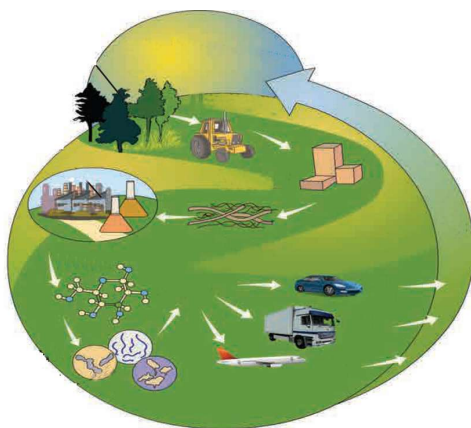
3. Answer the following questions (any five) :

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(i) Complete the following diagram :



- (ii) Explain the process of glycolysis.
- (iii) Write a short note on environmental conservation.
- (iv) Write any *three* distinguishing characters of phylum Echinodermata.
- (v) Observe the diagram given below and answer the questions :



- (a) Which fuel is shown in above diagram ?
- (b) Give *two* examples of each solid and liquid fuel.
- (vi) What is meant by stem cells ? Write any *two* uses of stem cells.
- (vii) What will you do in the following situation ? Why ?
Child of your neighbour is addicted to tobacco chewing.
- (viii) Following are some pictures of disasters. Which precautions would you take during these disasters ?



(A)



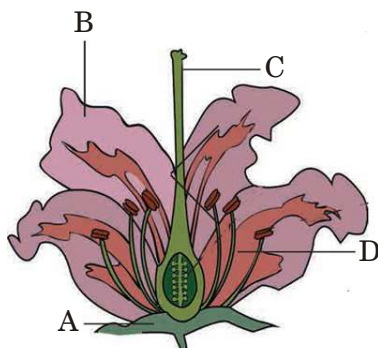
(B)



(C)

4. Answer the following questions (any one) :

(i) Observe the diagram and answer the questions :



- (a) Label the parts A, B, C, D shown in above diagram.
 - (b) Write name of any *one* type of whorl.
 - (c) Write any *two* components of Androecium.
 - (d) Write any *two* components of Gynoecium.
- (ii) Draw the flow chart showing step by step energy transformation in the following power plants :
- (a) Thermal Power Plant
 - (b) Nuclear Power Plant
 - (c) Solar Power Plant.
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