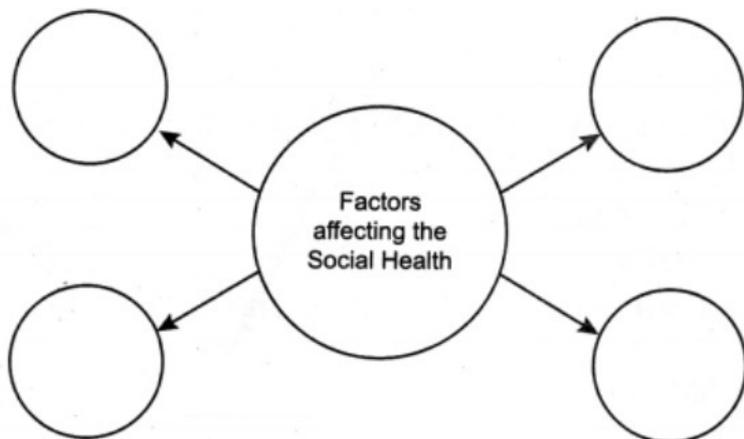


Q2(A) Give scientific reasons (any two) :**(4)**

- (1) Hydroelectric energy, solar energy and wind energy are called renewable energies. Justify.
- (2) Though tortoise lives on land as well as in water, it cannot be included in class-Amphibia.
- (3) We feel tired after exercise.

(B) Answer the following (any three) :**(6)**

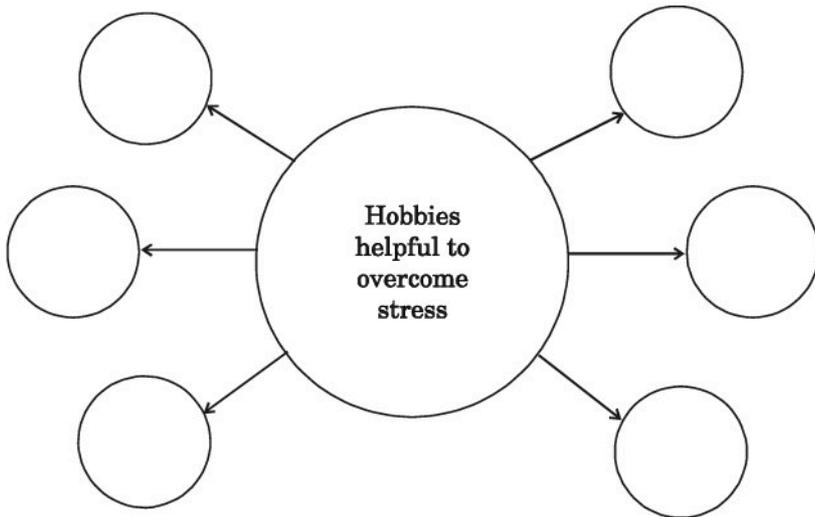
- (1) Redraw and complete the given chart.



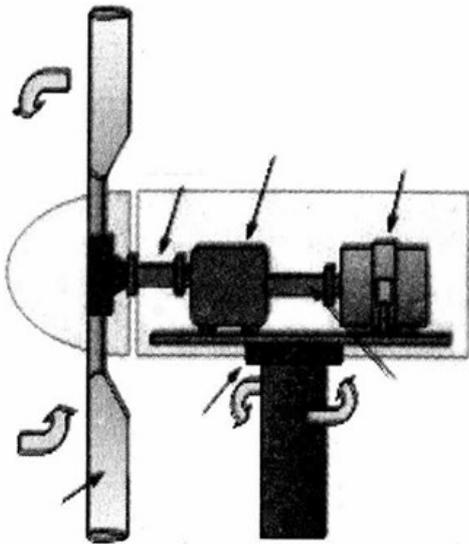
- (2) Write any four important facts which must be thought over while considering the scope of disaster.
- (3) What is DNA fingerprinting? Where is it mainly useful?
- (4) Name two fuels obtained by microbial processes. Why is it necessary to increase the use of such fuels?
- (5) Write four adverse effects of radiations on human body.

Q3) Answer the following (any five) :**(15)**

- (1) Read the statements and answer accordingly:
 - (a) Calcareous spines are present on the body. Tube feet are used for locomotion and capturing prey also.
→ Identify the phylum and give one example.
 - (b) I live in your small intestine. Pseudocoelom is present in my thread like body.
→ Identify the phylum and give one example.
 - (c) My body is spindle shaped. I respire with the help of gills.
→ Identify my class and give one example.
- (2) Explain the following terms :
 - (1) Stem cells
 - (2) Cloning
 - (3) Genetically modified crops.
- (3) Complete the following chart :



(4) Observe the given picture and answer the questions.



- (1) Identify the given diagram.
 - (2) What is the source of energy in this project?
 - (3) Why this source is supposed to be ecofriendly?
- (5) (1) Define vestigial organs.
 (2) Write names of any two vestigial organs in the human body.
 (3) Write name of those animals in which these vestigial organs are functional.
- (6) Complete the given paragraph by filling the blank spaces from the options given in the bracket. (oxygen, pyridines, mechanical, CO₂, petroleum, fatal, polyester, norcadia)
 Spilling of oil occurs in ocean due to various reasons. This oil may prove and toxic to aquatic organisms. It is not easy to remove the oil layer from surface of water by method. However, bacteria like *Pseudomonas* spp. and *Alcanivorax borkumensis* have to ability to destroy the and other chemicals. Hence, these bacteria are used to clear the oil spills. These are called as hydrocarbonoclastic bacteria (HCB). HCB decompose the hydrocarbons and bring about the reaction of carbon with and water is formed in this process.
- (7) Write names of any six materials which are to be in the first-aid box.
- (8) (1) What are vitamins?
 (2) Classify them according to their solubility.
 (3) Give one example of each type as per above classification.

Q4) Answer any one of the following :

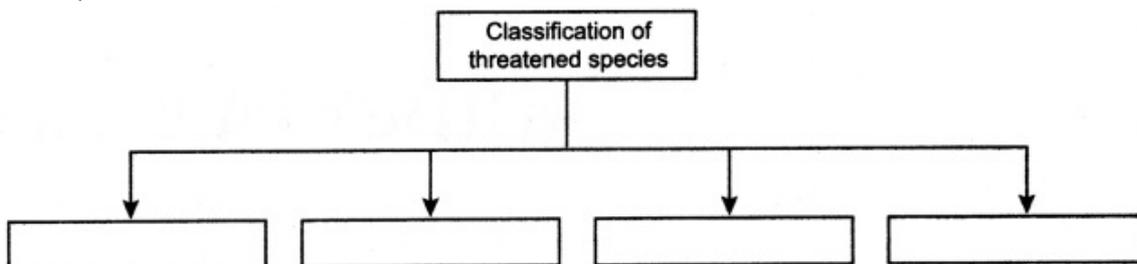
(5)

(1) Answer the following questions based on human male reproductive system:

- (a) In which organ sperms are formed?
- (b) What is the length of a sperm?
- (c) What is the work of vas deferens?
- (d) By which type of cell division, sperms are formed?
- (e) Name any two unpaired organs of male reproductive system.

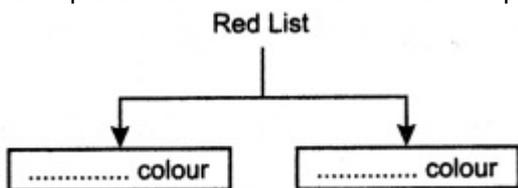
(2) Answer the following questions based on environmental conservation and biodiversity:

(a) Complete the flow chart:



(b) How can biodiversity be conserved ? Give any four points.

(c) Complete the flow chart: Colour of the pages in Red List of Endangered Species.



All the Best