



# Nayak's Tutorials

## Practice Paper- 2

Marks : 40

Std: X SSC

Science -2

Duration: 2 Hrs

**Q.1)(A) Choose the correct alternative.**

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- (i) Which one of the following is not a symptom of Syphilis?  
 (a) Alopecia      (b) Inflammation of joints      (c) Fever      (d) Oozing of pus
- (ii) In a windmill, the function of \_\_\_\_\_ is to increase the rotations per minute.  
 (a) Control pods      (b) stack      (c) shaft      (d) gear box
- (iii) Rifamycin is effective against \_\_\_\_\_.  
 (a) Cholera      (b) tuberculosis      (c) typhoid      (d) diarrhoea
- (iv) Petromyzon belongs to class \_\_\_\_\_.  
 (a) Cephalochordata      (b) Cyclostomata      (c) Reptilia      (d) Amphibia
- (v) Phenylketonuria arises due to genetic changes in \_\_\_\_\_.  
 (a) osteoblasts      (b) hepatocytes      (c) blastocytes      (d) osteocytes

**Q.1)(B) Answer the following Questions.**

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- (i) Give the full form of  
 IPCC →
- (ii) Which one of the following is different from others? Why?  
 Euspongia, Aurelia, Adamsia, Physalia
- (iii) What is biotechnology?
- (iv) Fill in the blank.  
 The misuse or illegal sale of the written literature, software, photos, videos, music, etc. of others by obtaining from internet is called as \_\_\_\_\_.
- (v) State whether the following statement is True or False. If false, write the correct statement.  
 The Electron Transfer Chain reaction is operated in cytoplasm only.

**Q.2) A) Give scientific reasons: (Any 2)**

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- (i) If frog population declines suddenly in a paddy field, the paddy crop will be adversely affected.
- (ii) Use of natural gas to obtain electrical energy is better than that of coal.
- (iii) Why males are responsible for the gender of the child?

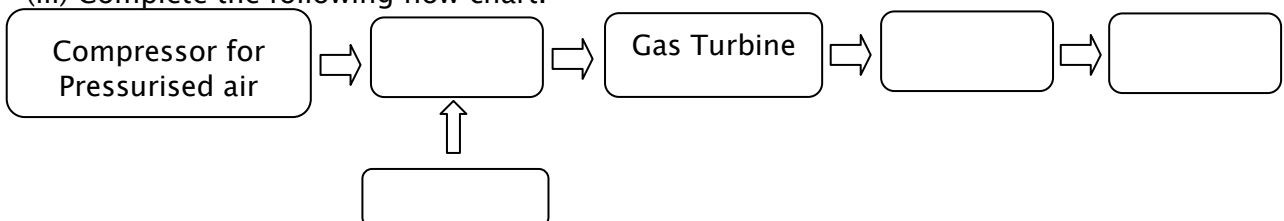
**Q.2) B) Answer the following Questions. (Any 3)**

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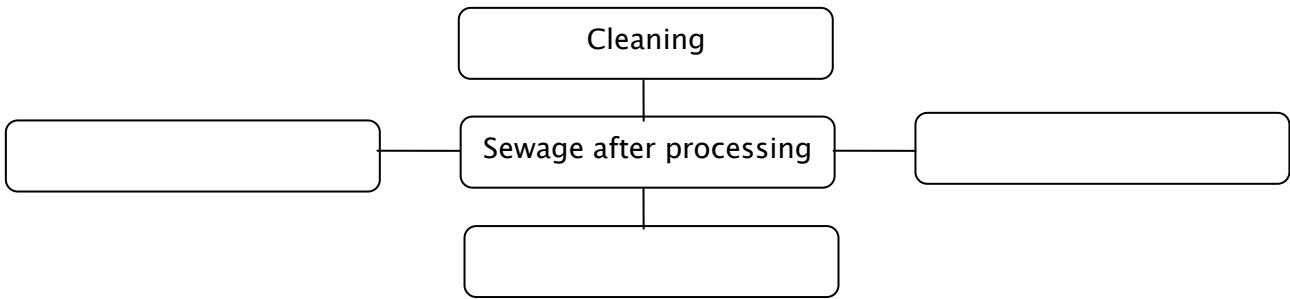
- (i) Identify the missing link in the food chain given below.  
 Green plants → \_\_\_\_\_ → Frog \_\_\_\_\_ → Eagle
- (ii) Complete the following table by writing the symptoms of the disease.

| Disease  | Symptoms |
|----------|----------|
| Scurvy   |          |
| Pellagra |          |

- (iii) Complete the following flow chart.



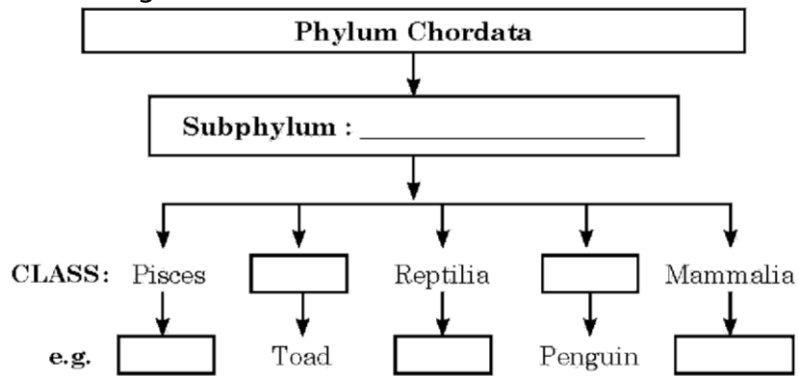
(iv) Complete the following web.



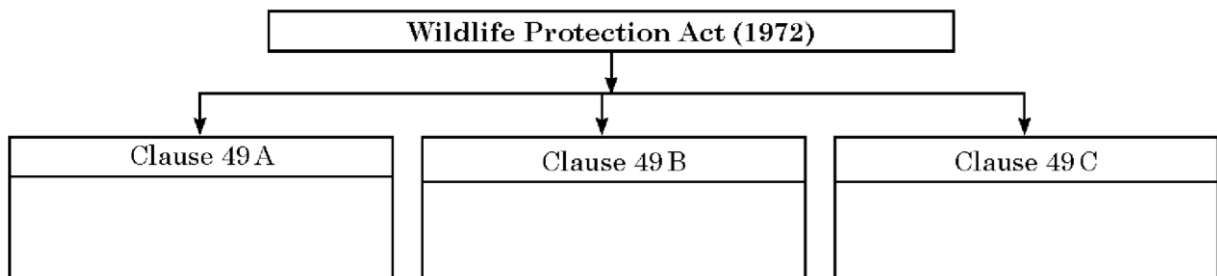
(v) Write a short note on edible vaccines.

**Q.3) Answer the following questions. (Any 5)**

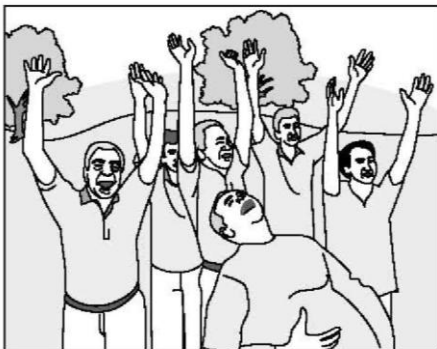
(i) Complete the following flow chart.



(ii) Complete the following flow chart by writing about the given clauses under the Wildlife Protection Act, 1972.



(iii) Complete the box by writing about what the following picture indicates.



- .....
- .....
- .....

(iv) Read the following passage and answer the question given below :

Some students did research on the embryos of different animals. When they observed the stages of embryonic development of some animals, it showed that all the embryos were showing extreme similarities during initial stages and those similarities decrease gradually.

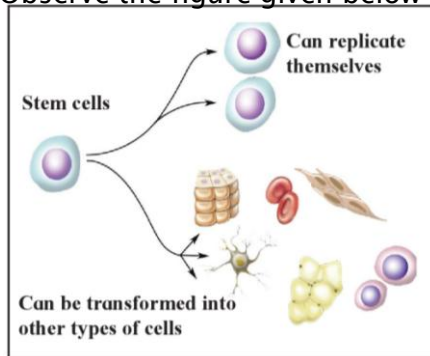
Questions:

- (a) What was the research about ?
- (b) What did the similarities indicate?
- (c) In which stage were the similarities more prominent ?

(v) Complete the following table.

| Microbe           | Product produced by them |
|-------------------|--------------------------|
| Lactobacilli      |                          |
|                   | Soya sauce               |
| Xanthomonas sp.   |                          |
|                   | Ethanol                  |
| Aspergillus niger |                          |
|                   | Vinegar                  |

(vi) Observe the figure given below and answer the questions



- (a) What does the given figure depict ?
- (b) Name any two cells produced from stem cells.
- (c) What is the source of obtaining stem cells ?

(vii) Classify the following disasters into Natural and Man-made in the table below.

(Earthquake, Riot, Drought, Theft, Storm, Terrorism)

| Natural Disasters | Man-made Disasters |
|-------------------|--------------------|
|                   |                    |
|                   |                    |
|                   |                    |

(viii) Distinguish between Mitosis and Meiosis on the basis of following parameters:

- A) Number of daughter cells formed.
- B) Occurs in which type of cells.
- C) Significance

**Q.4) Answer the following Questions. (Any 1)**

**5**

(i) Complete the following paragraph with the help of words given in the bracket.

(haploid, meiosis II, meiosis, identical, crossing over, similar, different, diploid, meiosis I, mitosis)

Meiosis- II is just like \_\_\_\_\_. In this stage, the two haploid daughter cells formed in \_\_\_\_\_ undergo division by separation of recombined sister chromatids and four haploid daughter cells are formed. Process of gamete production and spore formation occurs by \_\_\_\_\_. In this type of cell divisions, four haploid daughter cells are formed from one \_\_\_\_\_ cell. During this cell division, \_\_\_\_\_ occurs between the homologous chromosomes and thereby genetic recombination occurs. Due to this, all the four daughter cells are genetically \_\_\_\_\_ from parent cell and from each other too.

(ii) Draw a neat labelled diagram of flower and explain its parts.

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