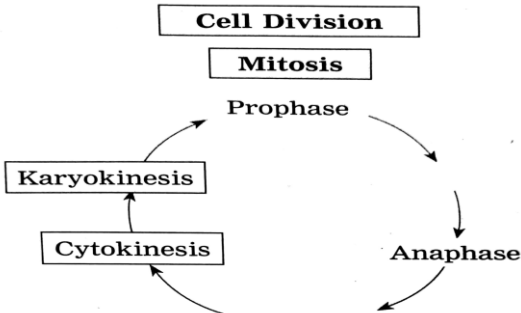


Q.1 A) Solve the following questions

5

1)



Complete the following blanks.

- 2) Give the full form of NADP.
- 3) Give one difference between: binary fission and multiple fission.
- 4) What is an inoculants?
- 5) What are biofuels?

B) Complete the following chart

5

Type	Character	Examples
Cyclostomata	-----	-----
-----	Gill respiration	-----
Amphibia	-----	-----
-----	-----	Whale, Cat, Man
-----	Poikilotherms	-----

Q.2 Answer the following questions. (Any Five)

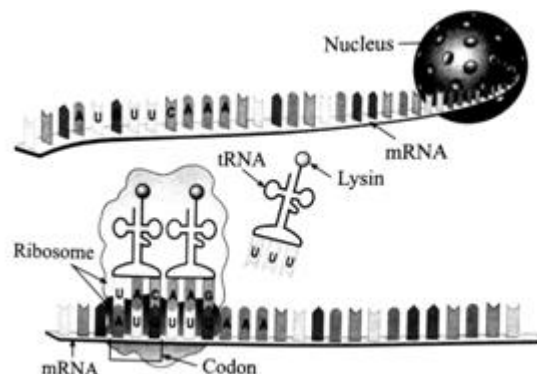
10

- 1) Distinguish between: Monozygotic twins and dizygotic twins.
- 2) What are the advantages and limitations of solar energy?
- 3) Give reason: Vertebrates have been slowly originated from invertebrates.
- 4) Give the Classification chart of Penguin.
- 5) Give reason: 'Sometimes, higher plants and animals too perform anaerobic respiration.'
- 6) Which fuels are obtained from biomass?
- 7) Give short note on: Sacred Groves.

Q.3 Answer the following questions. (Any five)

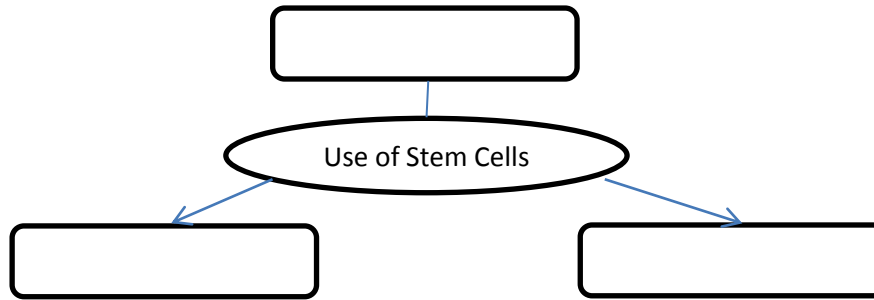
15

- 1) Observe the figure and answer the following questions.
 - i) Which is the initiation codon? Where is it present?
 - ii) What are the types of RNA present inside the ribosome? Which triplet codon is present on it?
 - iii) Which genetic code is present on m-RNA that is leaving the nucleus? What must be the sequence on the DNA to have



such code on m-RNA?

- 2) Which is the energy currency of the cell? Explain it in detail.
- 3) Write the correct answer in blank circles.



- 4) Give short note on Speciation.
- 5) Explain the concept of IVF.
- 6) What is the impact of biotechnology on agriculture and other related fields?
- 7) What will you do? Why? 'You are spending more time in internet/ mobile games, phone etc.'

Q.4 Answer the following question. (Any one)

5

- 1) Read the paragraph and answer this following question's given below

Locomotion is considered as important characteristics of the animals. However, animals belonging to Porifera are said to be sedentary. Every other phylum has typical locomotory organs. E.g. Nereis crawls with the help of Parapodia, whereas Earthworm buries in soil by setae. Spiders have four pairs of walking legs, Crab has five while all insects have three pairs of walking legs. The walking legs are also called appendages. Starfish moves with the help of tube feet. Snails and bivalves use muscular foot for locomotion. Birds flying with their spread out wings and fish swimming with their fins, both have spindle-shaped body tapering at both the ends. While flying or swimming such body offers least resistance during locomotion. Mammals have two pairs of limbs while animals like snakes are limbless. Other animals belonging to the class of snakes also have very weak limbs which make them creep on the ground.

- i) What are the locomotory organs in phylum Annelida?
 - ii) Which phylum has a characteristic of jointed appendages?
 - iii) Which the locomotory organ of animals belong to phylum Mollusca?
 - iv) Which class of animals shows weak legs?
 - v) In which class of animals the fore-limbs are modified?
- 2) Explain which are the various processes in tissue culture?

*This question paper is for practice purpose only.