

St. Mary's Convent Inter College, Prayagraj
First Terminal Examination 2024-25

Time : 2hrs.

Class -9

M.M. : 80

Biology

Name : Roll No. Date :

Section A

(Attempt all questions from this section)

Question 1.

Choose one correct answer to the questions from the given options. (Do not copy the question. Write the correct answer only) (1x15)

- (i) Assertion: All cells have cell membrane
Reason: Cell membrane is composed of lipoprotein..
- a. A is True and R is False
b. A is False and R is True
c. Both A and R are True
d. Both A and R are False
- (ii) Respiration is a
- a. Anabolic process
b. Catabolic process
c. occurs when energy is required
d. performed at intervals
- (iii) Well defined nucleus is absent in
- a. Plant cell
b. Animal cell
c. eukaryotic cell
d. prokaryotic cell
- (iv) Assertion: Cardiac muscles show rhythmic contraction and relaxation.
Reason: Cardiac muscles are involuntary.
- a. A is True and R is False
b. A is False and R is true
c. Both A and R are true.
d. Both A and R are false.
- (v) A biology teacher asked her students to give two examples of Amphibians.
Raj said : Frog and Toad
Sonu said : Newt and Emu
Lata said : Salamander and Newt
Abhay said : Salamander and Turtle
Who were correct?
- a. Abhay and Sonu
b. Sonu and Lata
c. Raj and Lata
d. Abhay and Raj
- (vi) Assertion: Some pollen grains are light and dry.
Reason: Pollen grains are produced in large numbers.
- a. A is true and R is false
b. A is false and R is True
c. Both A and R are True
d. Both A and R is False.
- (vii) The number of antipodal cells in the embryo sac is:
- a. 4
b. 5
c. 3
d. 0



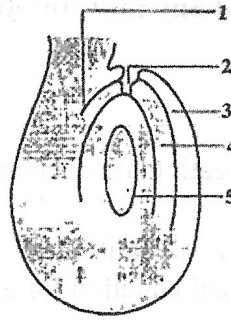
- (viii) Exine and intine are the structural components of:
- Embryo-sac
 - Pollen grain
 - stigma
 - seed
- (ix) A plant is fertilized by pollen grains from anther of another plant. Which of the following characteristics are expected to be found in its flowers?
- Anthers and stigma mature at the same time.
 - Male and female flowers are borne on two separate plants.
 - Flowers always remain closed.
 - Styles are long while the anthers are short.
- Both i and ii
 - Both ii and iv
 - Both ii and iii
 - Both iii and iv
- (x) Secretory organelles of the cell are
- Dictyosomes
 - lysosome
 - ribosome
 - peroxisome
- (xi) Parenchyma cells are
- Relatively thin walled
 - Thick walled and specialized
 - Lignified
 - None of the above
- (xii) The cytoplasmic projections arising from the cyton is
- Pseudopodia
 - Flagella
 - cilia
 - dendrons
- (xiii) The expanded tip of pedicel from where the floral parts arise is called:
- Thalamus
 - Receptacle
 - both a and b
 - none of these
- (xiv) After fertilization in plant, the petals, stamens, style and stigma of flower
- Change to fruit
 - Change to seed
 - fall off
 - remain intact
- (xv) In experiment on respiration, the seeds taken as control are boiled to avoid
- Release of oxygen
 - Bacterial decay
 - reaction with KOH
 - photosynthesis
- (xvi) Which of the following belong to the class pisces?
- Jellyfish
 - Dogfish
 - cuttlefish
 - silverfish

Question 2

- Name the following
 - Product obtained from the breakdown of glucose.
 - The type of flower that favours cross-pollination.
 - The phylum to which liver fluke and Planaria belong.
 - The type of plastid involved in photosynthesis.
 - Collective name of xylem and phloem.

(5)

- (ii) Given below is a diagram of the ovule. Read the information below the diagram and fill in the blanks. (5)



Ovule is the inner part of the ovary. Ovule is destined to become the seed and the ovary to become the fruit containing the seed inside.

Each ovule has one or two protective coverings the integuments which leaves a small opening at one end called the for the entry of the . Enclosed by the integuments is the and further inside it is the which contains cells.

- (iii) Arrange and rewrite the terms in each group in the correct order so as to be in a logical sequence beginning with the term that is underlined. (5)

- Denitrification, Ammonification, Nitrification, Nitrogen fixation
- Genes, nuclear membrane, nucleoplasm, nucleolus, chromosomes
- Flower, seed, bud, pollination, Fruit
- Pollen-grain, stigma, ovary, embryo-sac, style.
- Embryo, first male gamete, ,egg cell, zygote, micro pyle

- (iv) Give the biological term for the following. (5)

- The kind of germination in which the cotyledons remain underground..
- A chain of chemical reactions that enable all living organisms to synthesize energy.
- Seeds without the endosperm.
- Fusion of male gamete with the two polar nuclei
- Parenchyma cells that contain chloroplast.

- (v) Given below is a diagram of a flower. Match the labels (in numbers) with their correct functions. (5)

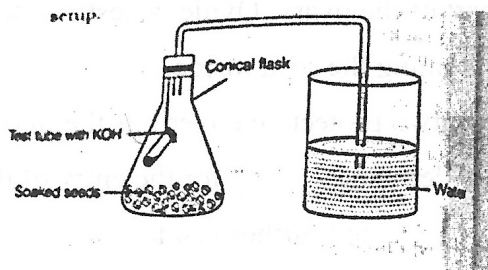
Parts of a bisexual Flower	Functions
	<ol style="list-style-type: none"> Makes the flower attractive. Floral parts are borne on it. Protects the reproductive organs of the flower. Acts as a landing place for the pollen grain. Connects the stigma to the ovary

Section B

(Attempt any four questions from this section)

Question 3

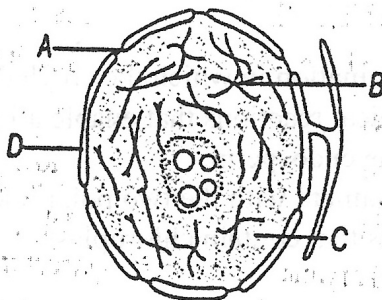
- (i) Explain Botulism. (1)
- (ii) Name the protective sheath that covers the plumule and the radicle in the Maize grain. (2)
- (iii) State two features of a good antibiotic (2)
- (iv) Write the overall chemical equation for anaerobic respiration. (2)
- (v) Study the diagram and answer the following questions. (3)



- a. What is the aim of the experiment?
- b. Why did the water in the tube rise?
- c. What is the purpose of KOH?

Question 4

- (i) Expand the abbreviation ATP (1)
- (ii) Making our food free from disease causing germs is essential. Explain any one technique in doing so. (2)
- (iii) What is nitrogen fixation? Give one example of a free living bacteria. (2)
- (iv) Give two differences between apical meristem and lateral meristem. (2)
- (v) Study the diagram and answer the following questions. (3)



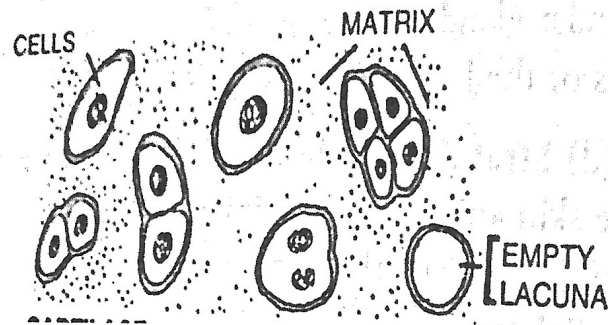
- a. Name the structure.
- b. Why is it important to the cell?
- c. Is this structure found in all the cells? Justify your answer

Question 5

- (i) What is a poly -adelphous condition? (1)
- (ii) Give one difference between: (2)
 - a. Protandry and Protogyny.
 - b. Herkogamy and heterostyly.
- (iii) Given below are two statements which are wrong. Correct and rewrite the following statements. (2)
 - a. All mushrooms are edible.
 - b. The kingdom fungi include eukaryotic, multicellular, autotrophic organisms.
- (iv)
 - a. Why are xylem and phloem called complex tissue? (2)
 - b. What type of tissue blood is?

c. Study the diagram and answer the following questions.

(3)



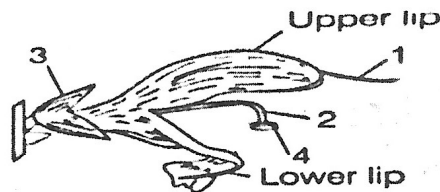
- Identify the figure.
- Mention one of its chief characteristics.
- Mention one of its locations.

Question 6

- What are bioweapons? (1)
- Give two differences between self and cross pollination. (2)
- State two uses of bacteria in industry, (2)
- (iii) (a) Which element of phloem is made up of dead cells? (2)
(b) Give the name of living component of xylem.
- Draw the internal structure of a maize grain. (3)

Question 7

- Maize grain is a one seeded fruit .Comment. (1)
- Give reason why: (2)
 - Salt is added to the pickles.
 - Experiments on respiration are carried out in dark.
- Mohini was observing a flower that was pollinated by an insect. (2)



- What adaptation does the flower possess in order to carry out such type of pollination?
 - State any one disadvantage of this type of pollination.
- (iv) Name a structure that is: (2)
- Absent in plant cell
 - Absent in animal cell
- (v) Draw the diagram of a mature pollen-grain. (3)
