

CBSE Class 11 Biology

Set 5

Section I

Each question carries 1 mark

1 x 5 = 5 marks

1. What is binomial nomenclature? Why is it used?
2. What is syngamy?
3. Define RQ? Write its value?
4. What are tyloses?
5. Write at least 2 differences between the plant cell and animal cell.

Section II: Each question carries 2 marks

2 x 5 = 10 marks

1. Define: Diffusion, transportation, and apoplast?
2. Write in brief about vernalisation.?
3. What are the proteins? How are they classified?
4. What are cold- blooded and warm blooded animals? Give reasons and examples for each?
5. Trichoderma are included in which type of kingdom? Why is it included?

Section III: Each question carries 3 marks

3 x 12 = 36 marks

1. Write the difference between autotrophic, and heterotrophic nutrition?
2. Define grafting? Why is grafting not possible in monocot stems?
3. What are the phases that are involved in mitosis? Explain: Prophase, telophase and cytokinesis?
4. Transport of xylem is unidirectional and phloem is bidirectional? Support your answer. Give two reasons.
5. a. What is periderm? How does periderm formation take place in dicot stem?
b. What causes stomata to open and close during transpiration process?
6. Draw the flow chart of glycolysis process.
7. What are the different growth regulators and how does it impact on day to day life? What is its significance?
8. Write the functions of thyroid and adrenal gland.
9. Write a short note on Golgi apparatus?
10. Classification and Nomenclature of Enzymes:
Oxidoreductases/dehydrogenases Transferases Hydrolases

11. Compare C3 and C4 cycles in plants?
12. Define virus and add a short note on viruses?

Section IV: Each question carries 4 marks:

1 x 4= 4 marks

1. Show different life cycle patterns with the help of neat labeled diagram.
a) Haplontic (b) Diplontic (c) Haplo-diplontic

OR

Explain the following vertebrates:

- a. Osteichthyes
- b. Reptilia
- c. Cyclostomata

Section V: Each question carries 5 marks:

3 x 5= 15marks

1. Explain the process of secondary growth in stems of woody angiosperm with help of schematic diagrams. What is the significance?

OR

Draw illustrations to bring out anatomical difference between (a)
Monocot root and dicot root
(b) Monocot stem and dicot stem

2. What are epithelial tissues? Where are they found? Explain each of them in detail?

OR

Write the difference between the following:

- a. squamous epithelium and cuboidal epithelium
 - b. glandular epithelium and Compound epithelium
 - c. Septal nephridium and pharyngeal nephridium
 - d. Tight junctions and Gap junctions
3. State the following:
 - a. The organelle which is called as power house of the cell.
 - b. The organelle which acts as the selectively permeable membrane.
 - c. The organelle which has rough and smooth endoplasmic reticulum
 - d. The organelle which control the cell.
 - e. The organelle that is called as suicidal bag of the cell

OR

Explain in detail about the structure of the neuron with the help of a neat labeled diagram? Describe the transmission of a nerve impulse across a chemical synapse?