

# APEEJAY SCHOOL, SCHOOL, SHEIKH SARAI-I

**Biology**  
**Class – XI**

Time allowed : 3 Hrs. Maximum Marks : 70

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1. What is the advantage of scientific names ? 1
2. (i) Give an example of a protist that reproduces by multiple fission. 1  
(ii) Name the group of protista which includes decomposers. 1
3. (i) Name a green alga which is used as protein rich food. 1  
(ii) What gives the characteristics Red colour to Red algae ? 1
4. Name two types of roots that give additional support to the plant. 1
5. Why is heartwood dark in color ? 1
6. How many spermathecal openings are found in pheretima ? Where ? 1
7. Name the type of bond by which monomers are held together in  
(i) Polysaccharides 1  
(ii) Polypeptides 1
8. (a) When does the actual reduction in chromosome number take place during meiosis. 1  
(b) Name the best stage of cell division to study the chromosome morphology. 1
9. Mention any four advantages of taxonomy. 2
10. What are methanogens? Where are they found? How are they useful? 2
11. Name the type of fertilisation that is unique to angiosperms. Describe it. 2
12. Differentiate between polyps and medusa. Give examples. 2
13. Define phyllotaxy. What kind of phyllotaxy occurs in Hibiscus and Alstonia ? 2
14. Differentiate between hypogynous and epigynous flower with an example of each. 2
15. Name the tissue that lines the trachea in humans. State any two advantages of this tissue being present there. 2
16. What are plasmids ? How are they useful in genetic engineering? 2
17. Define crossing over. What is its significance to living beings ? 2
18. How are eukaryotic cells different from prokaryotic ones ? Give two points. 2
19. Write 6 important characteristics features of the phylum fungi. 3
20. Represent schematically the life cycle of a fern plant. 3
21. Differentiate between animals of Chondrichthyes and Osteichthyes morphologically. Give three points. 3

22. Draw a diagram of the vertical section of a maize grain and label six parts. **3**
23. Describe the internal structure of a dorsiventral leaf with the help of a neat diagram. **3**
24. Describe any six adaptations a frog has to live successfully as an amphibian. **3**
25. What are the salient features of the fluid mosaic model of plasma membrane ? **3**
26. List three important differences between mitosis and meiosis. **3**
27. How are DNA and RNA structurally different from each other ? Give three points. **3**
28. (a) State four ways in which proteins play an important role in our body. **3**  
 (b) Explain the mode of action of an enzyme with the help of labeled diagrams. **2+3**
29. (a) Draw a neat and labeled diagram to show T.S. of a dicot stem that has completed secondary growth. **3**  
 (b) What is periderm ? How does its formation occur in a tree ? **2+3**
30. (a) Mammals are highly evolved among animals. Write any four features of this group. **3**  
 (b) Write three important features of Birds which make them advanced over Reptilia. **2+3**