



**B.Sc. III - Semester (CBCS) Degree Examination, Nov./Dec. - 2018**

**BOTANY**

**(Plant Histology, Anatomy, Embryology And Palynology)**

**Paper - 3.1**

**(New)**

**Time : 3 Hours**

**Maximum Marks : 70**

**I. Answer the following questions:**

**(15×1=15)**

1. Name the innermost layer of cortex.
2. Mention the two types of lateral meristems in plants.
3. Define term "Plerome".
4. What are latex cells? Give an example.
5. Name the cementing material found cell of Sclerenchyma.
6. What is Amphivasal type of vascular bundle?
7. What is Albumen?
8. Define orthotropous ovule.
9. What is Amoeboid tapetum? Give an example.
10. What are Stone cells? Mention its function.
11. What is Pollen kit? Mention its function.
12. What is Xenogamy?
13. Define the term "cleavage polyembryony".
14. What is the functional unit of male gametophyte?
15. What is Chiropterophily?

**[P.T.O]**



(5×5=25)

II. Answer any Five of the following questions.

16. What is simple permanent tissue? Explain the different types of sclerenchyma.
17. What are laticiferous tissues? Explain different types.
18. Explain the Histogen theory of shoot apical meristem.
19. Describe the T.S of Monocot root with neat labeled diagram.
20. What is megasporangium? Explain the formation of megaspores with neat labeled diagram.
21. Explain the wall layers of pollen grains and their significance in palynology.
22. What is Monosporic embryo sac? Explain the development of polygonum type of embryo sac.

III. Answer any Three of the following questions :

(3×10=30)

23. What are meristems? Explain the tunica - corpus theory of apical meristem.
  24. Describe the T.S of Dicot leaf with neat labeled diagram.
  25. Explain the Microgametogenesis with neat labeled diagram.
  26. What is secondary growth? Explain the Secondary growth in dicot stem with neat labeled diagram.
  27. What is cross pollination? Explain the different agents of cross pollination.
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