

NS3S-1556-A-23/24  
B.Sc. III Semester (NEP) Degree Examination  
**BOTANY - PLANT ANATOMY AND DEVELOPMENT BIOLOGY**  
**PAPER - BOT-A - 3.1**

Time : 2 Hours

Maximum Marks : 60

*Instructions to Candidates:*

1. *Answer the questions according to instructions*
2. *Diagrams will enhance the value of your answer*

**SECTION - A**

I. Answer any FIVE of the following Questions.

(5×2=10)

1. ~~a)~~ Significances of Bulliform
- ~~b)~~ What is microsporogenesis.
- ~~c)~~ Define porogamy
- ~~d)~~ Differentiate sap wood and Heart wood.
- e) What is conjoint vascular bundle
- f) Nemec phenomenon.
- ~~g)~~ What is rhytidome?

**SECTION - B**

II. Answer any Four of the following questions.

(4×5=20)

- ~~2.~~ Explain the structure and functions of parenchyma.
- ~~3.~~ Write the contribution of M.S. Swaminathan.
- ~~4.~~ Describe briefly Tunica - corpus theory of apical meristem.
- ~~5.~~ Difference between microspore and pollengrain.
6. Write the application of anatomy in pharmacognocoy.
7. Short note on transition from vegetative apex into reproductive apex.

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### SECTION - C

III. Answer any **THREE** of the following questions.

(3×10=30)

8. Anatomical differences between monocot and Dicot stem.
  9. Short note on
    - a) Anatropous ovule
    - b) Pollination syndrome
  10. Discuss embryo and Endosperm relationship.
  11. Explain ABC model of developmental patterns at flowering apex.
  12. Describe Anamalous secondary growth in Boerhaavia.
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