

Seat Number

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April 2015



खडक - 019

**BOTANY PAPER - I (NEW) : BOT - 241**  
**Plant Anatomy**  
**(24145)**

P. Pages : 2

Time : Two Hours

Max. Marks : 40

**Instructions to Candidates :**

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory.
5. Figures to the right indicate full marks.
6. Draw neat and labelled diagram wherever necessary.

**1. Attempt any eight.**

8

- i) The development of secondary growth in extra stelar region is due to presence of
  - 1) Parenchyma
  - 2) Cambium
  - 3) Cork- cambium
  - 4) Collenchyma
- ii) The process of guttation is take place by
  - 1) Stomata
  - 2) Mesophyll tissue
  - 3) Epidermis
  - 4) Hydathodes.
- iii) The process of formation of cuticle is called
  - 1) Silicification
  - 2) Cutinisation
  - 3) Lignification
  - 4) Suberisation.
- iv) The insectivorous plants posses special secretory structures called.
  - 1) Lenticels
  - 2) Laticiferous ducts
  - 3) Resin ducts
  - 4) Digestive glands
- v) What is Chlorenchyma?
- vi) Give the function of Nectaries.

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vii) What is trichosclereids?

viii) Why the vascular bundle of monocotyledonous stem is called as closed vascular bundle?

ix) What are the complex tissue?

x) Give the types of collenchyma.

2. Attempt any four.

8

- a) Give the types of fibre.
- b) Describe the function of motor cells.
- c) What is 'Ring porous wood'?
- d) What is lignification?
- e) Give the functions of collenchyma.
- f) Describe the oil ducts.

3. Attempt any two.

8

- a) Describe the types of vascular bundles.
- b) What is Meristematic tissue? Give the types of Meristem.
- c) Give the Functions of parenchyma.

4. a) Solve any two.

6

- a) Give the types of trichome.
- b) Give the types of stomata.
- c) Explain the principal of inextensibility in relation to mechanical tissue system.

b) Give the function of epidermis.

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5. a) Sketch, label and describe secondary growth in dracaena stem.

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OR

b) Sketch, label and describe the primary structure of dicotyledon stem (sunflower)

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