



M 27391

Reg. No. : .....

Name : .....

**II Semester M.A./M.Sc./M.Com. Degree (Reg./Sup./Imp.)**  
**Examination, March 2015**  
**(2014 Admn. Onwards)**  
**BOTANY**

**BOT2C06 : Plant Anatomy and Microtechnique**

Time : 3 Hours

Max. Marks : 60

I. Answer **any two** of the following :

(2×8=16)

1) Write an account on stem apex concept and theories associated with it.

OR

2) Explain the differentiation of sieve element.

3) Discuss the importance of dehydration in anatomical studies. Add a note on dehydrating agents.

OR

4) Explain the technique of sectioning materials embedded in paraffin wax.

II. Answer **any two** of the following :

(2×6=12)

5) a) What is Quiescent centre.

1

b) Give two examples of modified leaf.

2

c) Explain the origin of lateral roots.

3

6) a) Define stomata.

1

b) Write on stomatal distribution.

2

c) Describe stomatal ontogeny.

3

7) a) Define stain.

1

b) Classify stains.

2

c) Explain the method of double staining.

3

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III. Answer **any six** of the following :

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(6x3=18)  
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- 8) Node-Nodal patterns.
- 9) Vascular cambium formation in monocot.
- 10) Compression wood.
- 11) Bulliform cells.
- 12) TEM.
- 13) Zircle-Elrik formula.
- 14) Whole mounts.
- 15) Embedding.

IV. Answer **any seven** of the following :

(7x2=14)

- 16) Pneumatophores.
- 17) Infected vascular cambia.
- 18) Latex.
- 19) Silica cells.
- 20) Salt glands.
- 21) Microtomes.
- 22) FAA.
- 23) Triple staining.
- 24) Staining of protein.
- 25) Smears.