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

Paper - BV : Angiosperm Anatomy, Microtechnique and Evolution

Time: 3 Hours Max. Marks: 70

Instruction: Draw diagrams wherever necessary.

- I. Answer any two of the following:
 - 1) Write an account on the chemical constituents of secondary wall.
 - 2) Describe the development of cambium in stem.
 - 3) Give an account of secretary cells and tissues.
 - 4) Explain differentiation of sieve elements.

 $(2\times10=20)$

- II. Answer any one of the following:
 - 5) Write an account on the types of microscopes and their parts.
 - 6) Discuss on the origin and evolution of species.

 $(1 \times 10 = 10)$

- III. Answer any three of the following:
 - 7) Origin of leaf and branch trace.
 - 8) Kranz-anatomy.
 - 9) Periderm formation in monocots.
 - 10) Polarity control of cell differentiation.
 - 11) Classification of stains.

 $(3 \times 5 = 15)$

IV. Answer any five of the following:

- 12) Cytohistological zonation.
- 13) Root-shoot interface.
- 14) Anatomical growth in secondary roots.
- 15) Bulliform cells.
- 16) Mescotyl differentiation.

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- 17) Microtome.
- 18) Nodal patterns.
- 19) Anatomy of seed coat. (5x3=15)

V. Answer any five of the following:

- 20) Sympodium as australestoro M. vmotanA magacipnA : VE 1995 9
- 21) Cataphylls
- 22) Sap wood
- 23) Digestive glands
- 24) Chromic acid
- 25) Resolving power about a late of the la
- 26) Adhesive
- 27) Plastochrone index.

(5×2=10) un account of secretary cells and fissues.