Reg. No. : .....

Name : .....

K19P 0261

II Semester M.Sc. Degree (Reg./Suppl./Imp.) Examination, April 2019
(2014 Admission Onwards)
BOTANY
BOT2C06 : Plant Anatomy and Microtechnique

Time : 3 Hours Max. Marks : 60

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

1) Give an account of the general features and development of shoot apical meristem. **(2×8=16)**

OR

2) Explain the development, types and functions of cambium in root and stem.

3) Write on the general principle and purpose involved in staining of plant materials.

OR

4) Explain the general principles of light microscopy. Add a note on phase contrast microscope.

II. Answer **any two** of the following : **(2×6=12)**

5) a) What is promeristem ? 1
b) What is quiscent centre ? 2
c) Write on root-stem transition. 3

6) a) What is a fixative ? 1
b) Composition and use of Carnoy's fluid. 2
c) Write on important dehydrating agents. 3

7) a) What is hypocotyle ? 1
b) Write on seedling root. 2
c) Explain the anatomy of the cotyledon. 3

P.T.O.

III. Answer **any six** of the following : **(6×3=18)**

8) Plastochrsone index.

9) Leaf trace and leaf gap.

10) Cambium in wound healing and grafting.

11) Wound periderm.

12) Anamolous secondary growth.

13) Clearing agents.

14) Toluene blue.

15) Stains for lipids and nucleic acids.

IV. Answer **any seven** of the following : **(7×2=14)**

16) Valamen root.

17) Infected vascular cambium.

18) Bidirectional activity of cambium.

19) Seive plate.

20) Secondary wall thickening.

21) Floral nectaries.

22) Trichomes.

23) Basic Fuchsin.

24) Adhesives.

25) Maceration.
