K18P 0096

Reg. No. : .....

Name : .....

Second Semester M.Sc. Degree (Regular/Supplementary/Improvement) Examination, March 2018

(2014 Admission Onwards)

BOTANY

BOT2C06 : Plant Anatomy and Microtechniques

Time : 3 Hours Max. Marks : 60

I. Answer **any two** of the following : **(2×8=16)**

1) Give an account of the unusual epidermal cells in plants.

OR

2) Write on the unique activity of the vascular cambium.

3) Give the composition and preparation of the fixatives used in microtechniques. Add a note on their specific uses.

OR

4) Give an account of the principles and purpose of staining.

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

5) a) Sap wood. 1

b) P-protein in seive element wall. 2

c) Root-stem transition. 3

6) a) Hypocotyle. 1

b) Camera lucida. 2

c) Triple staining. 3

7) a) Maceration. 1

b) Clearing of sections. 2

c) Staining for proteins, lipids and nucleic acids. 3

P.T.O.

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

8) Valamen root.

9) Theory of Popham and Chan.

10) Anomalous secondary growth.

11) Commercial use of barks.

12) Seed coat anatomy.

13) Principle of phase contrast microscope.

14) Wound periderm.

15) Plastochrosone index.

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

16) Autolysis.

17) Digestive glands.

18) Cambium.

19) Leaf trace.

20) Tree exudates.

21) Theory of Buvat.

22) Tension wood.

23) Protostele.

24) Quiescent centre.

25) Toluene blue.