K20P 0303

Reg. No. : .....

Name : .....

II Semester M.Sc. Degree (CBSS-Reg./Suppl./Imp.) Examination, April 2020
(2014 Admission Onwards)
BOTANY
BOT2C06 : Plant Anatomy and Microtechnique

Time : 3 Hours Max. Marks : 60

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

1) Give an account of cambium in terms of polarity, cell types and seasonal activity.

OR

2) Explain sieve element differentiation.

3) Write on the fixatives used for different plant materials. Add a note on techniques of fixing.

OR

4) Give an account of classification stains. Add a note on commonly used basic stains.

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

5) a) What is quiescent centre ? **1**

b) Write on the origin of lateral roots. **2**

c) Give the structure of modified leaves. **3**

6) a) What is a whole mount ? **1**

b) Write on the preparation of maceration slides. **2**

c) Give the methods for staining proteins and carbohydrates. **3**

7) a) What is heart wood ? **1**

b) Write on the types and functions of trichomes. **2**

c) Give an account of types of epidermal cells. **3**

P.T.O.

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

8) Root-stem transition
9) Valamen roots
10) Plastochrsone index
11) Secondary wall thickening
12) Phase contrast microscope
13) Methods of double staining
14) Dehydrating agents
15) Trichomes.

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

16) Pneumatophores
17) Trilaccenar nodes
18) Cambium in wound healing
19) Bidirectional activity of cambium
20) Sieve plate
21) Compression wood
22) Canada balsam
23) Bulliform cells
24) Carnoy's fluid
25) Microtome
26) Digestive glands.