FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2014

(CUCBCSS–UG)

Core Course—Botany

BOT 1B 01—ANGIOSPERM ANATOMY

Time : Three Hours   Maximum : 80 Marks

Part A

I. Answer *all* questions. One word/fill in the blanks **(1 mark** each) :

 1 Raphides present in plant parts is a ___———— type of crystal.

 2 _____ is a living mechanical tissue.

 3 In amphicribral vascular bundles, xylem seen towards

 4 If phloem, seen on either side of the xylem, it is known as   ____

 5 Phellem. phellogen and phelloderm together known as ____

 Answer in a single word :

 6 Who proposed Tunica Corpus theory ?

 7 Give an example of unilacunar leaf trace.

 8 Which is the meristematic portion in vascular bundle.

 9 What is the baloon like structures seen in the inner cavity of xylem vessels ?

 10 Connections seen in between the adjacent plant cells is called.

(10 x **1 =** 10 marks)

Part B

II. **Answer** *all* questions. **Short answer questions** :

 11 What is appostion ?

 12 What are cystolyths ?

 13 Define Histogen **theory.**

 14 What are hydathodes ?

 15 Define sapwood.

 16 What is multilacunar leaf trace ?

 17 What are the functions of cambium ?

 18 What are the main differences between bordered and simple pits ?

Turn over

19 Define growth rings.

20 Define nectaries.

<div align="right">(10 x 2 = 20</div>

Part C

III. Answer any *six* questions. Short essay 5 marks each :

21 Give a brief account of cell wall materials.

22 Write notes, on the different types of simple tissues.

23 Explain various types of secretory tissues present in plants.

24 Describe the structure of aerial roots present in *Tinospora*.

25 Distinguish between the structure of monocot and dicot leaves.

26 Explain the structure and functions of lenticels.

27 Describe with diagram the structure of monocot stomata.

28 Explain organization of root apex in monocots.

<div align="right">(6 x 5 = 301</div>

Part D

IV. Answer any *two* questions. Essay 10 marks each

29 Describe with diagrams the anomalous secondary thickening in Bignonia stern.

30 Write an essay regarding the various types of reserve food material present in plant parts.

31 Describe with diagrams the periderm formation.

<div align="right">(2 x 10 = 20 marks)</div>