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Y—107—2019

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (Second Year) (Third Semester) (Backlog) EXAMINATION

NOVEMBER/DECEMBER, 2019

BOTANY

Paper VII

(Histology, Anatomy and Embryology of Angiosperm)

(MCQ & Theory)

(Thursday, 19-12-2019)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—40

- N.B. :—*
- (i) Attempt *all* questions.
 - (ii) Choose the *correct* answer for MCQ.
 - (iii) Draw well labelled diagrams whenever necessary.
 - (iv) *All* questions carry equal marks.

MCQ

1. Answer the following Multiple Choice Questions : 10
- (i) Histogen theory was proposed by.....
 - (a) Hanstein in 1868
 - (b) Wolff's in 1759
 - (c) Schmidt in 1924
 - (d) None of these
 - (ii)is thick walled cells with lignin and lack nucleus and cytoplasm.
 - (a) Parenchyma
 - (b) Collenchyma
 - (c) Sclerenchyma
 - (d) None of these
 - (iii) When xylem or phloem completely surround xylem or phloem in a vascular bundle is.....
 - (a) Collateral
 - (b) Bicollateral
 - (c) Concentric
 - (d) None of these

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- (iv) Intrafascicular cambium is absent in.....
- (a) Dicot (b) Monocot
(c) Gymnosperm (d) None of these
- (v) Radially or polygonal cells present between two vascular bundles is called.....
- (a) phellogen (b) conjunctive tissue
(c) epidermis (d) none of these
- (vi) The point at which funicle is attached to the body of ovule :
- (a) Hilum (b) Raphe
(c) Endothecium (d) Chalaza
- (vii) Fertilization where male gametes in pollen tube enter ovule through chalaza is.....
- (a) porogamy (b) syngamy
(c) chalazogamy (d) mesogamy
- (viii) The water is agent of pollination in.....
- (a) Ornithophily (b) Entomophily
(c) Anemophily (d) Hydrophily
- (ix) Endosperm is formed by the fusion of.....
- (a) Two polar nuclei and a male gametes
(b) Egg cell and a male gametes
(c) Antipodals and male gametes
(d) None of the above
- (x) In plants, where four megaspore cells are functional and take part in the development of embryo sac is calledtype
- (a) Monosporic (b) Bisporic
(c) Trisporic (d) Tetrasporic

Theory

2. What is meristem ? Describe the classification of meristem. 10

Or

Write notes on :

- (a) Xylem
- (b) Internal structure of monocot leaf.

3. Describe internal structure of sunflower root. 10

Or

Write notes on :

- (a) Structure of typical ovule
- (b) Cross pollination.

4. Describe Allium type embryo development. 10

Or

Write notes on :

- (a) Helobial endosperm
- (b) Internal structure of anther.