

This question paper contains 3 printed pages]

B—107—2019

FACULTY OF SCIENCE AND TECHNOLOGY

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

MARCH/APRIL 2019

(CBCS/CGPA Pattern)

BOTANY

Paper VII

(Histology, Anatomy and Embryology of Angiosperms)

(MCQ & Theory)

(Saturday, 30-3-2019)

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

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Attempt All questions.

(ii) All questions carry equal marks.

(iii) Choose the correct answer for MCQ.

(iv) Draw well-labelled diagram wherever necessary.

MCQ

1. Multiple Choice Questions : 10

(i) Apical cell theory was proposed by

(a) Nageli in 1958

(b) Schmidt in 1924

(c) Hanstein in 1868

(d) None of these

(ii) provides strength to the organs and prevents the bending or pulling due to wind.

(a) Parenchyma

(b) Sclerenchyma

(c) Collenchyma

(d) None of these

P.T.O.

- (iii) When protoxylem lies towards outside and metaxylem lies towards the inside is called
- (a) Mesarch (b) Endarch
(c) Exarch (d) None of these
- (iv) Endodermis is present in
- (a) Monocot (b) Dicot
(c) Gymnosperms (d) None of these
- (v) Phloem is present on both sides of xylem in a vascular bundle is called
- (a) Collateral (b) Bicollateral
(c) Concentric (d) None of these
- (vi) Exine of the pollen grain is made up of
- (a) Sporopollenin (b) Callose
(c) Cellulose (d) None of these
- (vii) Fertilization where male gametes in pollen tube enters ovule through integuments is
- (a) Porogamy (b) Syngamy
(c) Mesogamy (d) Chalazogamy
- (viii) The insects are agent of pollination in
- (a) Anemophily (b) Ornithophily
(c) Entomophily (d) Hydrophily
- (ix) Egg apparatus consists of
- (a) Synergids and egg cells (b) Synergids and polar nuclei
(c) Central cells and egg cells (d) Antipodal cells and egg cells

- (x) In plants, where two megaspore cells are functional and take part in the development of embryo sac is called type.
- (a) Monosporic (b) Tetrasporic
- (c) Trisporic (d) Bisporic

Theory

2. Describe different types of complex tissues. 10

Or

Write notes on :

- (a) Parenchyma
- (b) Secondary growth in sunflower stem.

3. Describe internal structure of maize root. 10

Or

Write notes on :

- (a) Structure of pollen grain
- (b) Pollination.

4. Describe polygonum type embryo development. 10

Or

Write notes on :

- (a) Cellular Endosperm
- (b) Anatropous Ovule.