

PART C — (5 × 8 = 40 marks)

Reg. No. :

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write an essay on microgenesis.
Or
(b) Explain the structure of dicot embryo with a labelled diagram.
17. (a) Write an essay on xylem tissues.
Or
(b) Describe the secondary growth in dicot stem.
18. (a) Explain the mechanism of water absorption in higher plants.
Or
(b) Explain calvin's cycle.
19. (a) Explain the various steps involved in the mass cultivation of Nostoc.
Or
(b) Describe the industrial uses of Yeast.
20. (a) Write about the medium used in tissue culture.
Or
(b) Write down the procedure for rearing meristem culture.

Code No. : 11587 E Sub. Code : JAPB 21

B.Sc. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Second/Fourth Semester

Plant Biology Plant Bio-Technology — Allied
EMBRYOLOGY, PLANT ANATOMY, PHYSIOLOGY
AND BIOTECHNOLOGY.

(For those who joined in July 2016 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The other name of glandular tapetum is _____.
(a) Ameoboid (b) Secretory
(c) Periplasmial (d) None of the above
2. The stalk of the ovule is called
(a) Radicle (b) Peduncle
(c) Funicle (d) Receptacle
3. Phloem fibres are also called as _____
(a) Sclerenchyma fibres
(b) Bast fibres
(c) Surface fibres
(d) Libriform fibres

4. Polyarch xylem is found in
 - (a) Monocot stem
 - (b) Monocot root
 - (c) Dicot stem
 - (d) Dicot root
5. Tissue associated with Ascent of sap is _____
 - (a) Phloem
 - (b) xylem
 - (c) Cambium
 - (d) Parenchyma
6. The cohesion theory was given by
 - (a) Marcellow malpighi
 - (b) Dixon and Joly
 - (c) Theophrastus
 - (d) J.C. Boss
7. At the end of incubation, yeast cells are harvested by
 - (a) Filtering
 - (b) Solvent extraction
 - (c) Centrifugation
 - (d) Boiling
8. _____ is used for atmospheric nitrogen fixation.
 - (a) Cladophora
 - (b) Nostoc
 - (c) Caulerpa
 - (d) Yeast
9. The undifferentiated mass of cells are called _____.
 - (a) Callus
 - (b) Callose
 - (c) Organ
 - (d) Embryoid
10. In tissue culture medium, the p^H of the culture medium is adjusted to
 - (a) 6.8
 - (b) 6.2
 - (c) 5.8
 - (d) 7.3

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the functions of Tapetum.
Or
(b) Give an account of Ruminant endosperm.
12. (a) Give an account of sclerenchyma with suitable diagram.
Or
(b) Describe the internal structure of monocot stem.
13. (a) Write about stomatal transpiration.
Or
(b) Give an account on Ascent of sap.
14. (a) Write short notes on Heterocyst and Hormogone.
Or
(b) Explain the cell structure of yeast.
15. (a) Briefly explain the scope and importance of tissue culture.
Or
(b) How will you induce callus formation.