

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(Second Semester)

Branch – BOTANY

VEGETATIVE PLANT BIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Roots developing from a part of the plant other than radicle are called
(i) Epicaulous (ii) Adventitious
(iii) Fibrous (iv) Epiphyllous
- 2 Root pressure develops due to _____.
(i) Low osmotic potential in soil (ii) Passive absorption
(iii) Active absorption (iv) Increase in Transpiration
- 3 Scattered vascular bundles are present in
(i) Dicot stem (ii) Dicot Root
(iii) Bryophytes (iv) Monocot stem
- 4 Gums and resins are the _____ products of plant.
(i) Waste (ii) Accessory
(iii) Food (iv) None of the above
- 5 Thorn is a _____.
(i) Axillary Bud Modified (ii) Leaf modification
(iii) Climbing structure (iv) Always non woody

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Explain Fibrous roots.
OR
b. Give a note on internal structure of young dicot root.
- 7 a. Summarize symplastic and apoplastic passage of water.
OR
b. Describe velamen and photosynthetic roots.
- 8 a. Explain Prostrate and woody stem.
OR
b. Outline sketch of T.S. of *Nyctanthus* stem.
- 9 a. How wood is economically important?
OR
b. Narrate the root induction in stem cutting.
- 10 a. Compare any two phyllotaxy studied by you.
OR
b. Bring out the importance of stomata.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11 a. Highlight the internal structure of young monocot root.

OR

b. Discuss the root meristem with examples.

12 a. Differentiate endo and ectomycorrhiza.

OR

b. Elucidate guttation and root pressure.

13 a. Classify the parts of stem studied by you.

OR

b. Summarise the primary structure of dicot stem.

14 a. Explain any two physical properties of wood.

OR

b. Point out the process of secondary growth in stem.

15 a. Write an essay on leaf modification.

OR

b. Describe the internal structure of monocot leaves.

Z-Z-Z

END