

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(First Semester)

Branch – ZOOLOGY

PLANT BIOLOGY - I

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. Which one of the following is a colonial alga?
(i) *Ulothrix* (ii) *Spirogyra*
(iii) *Volvox* (iv) *Chlorella*
2. Which of the given diseases is related to Groundnut?
(i) Tikka (ii) Phomopsis blight
(iii) Leaf rust (iv) Alternaria blight
3. Which of the following family belong to sub class Polypetalae
(i) Annonaceae (ii) Acanthaceae
(iii) Euphorbiaceae (iv) Rubiaceae
4. Labellum in Orchidaceae comes to anterior side by the twisting of the ovary through 180 degree. This process is called
(i) Adnation (ii) Articulation
(iii) Resupination (iv) Attenuation
5. In photosynthesis which element is essential for the evolution of oxygen?
(i) Cl (ii) Mg
(iii) Fe (iv) All of the above

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. (a). Narrate the general characters of algae.
(OR)
(b) Explain the asexual reproduction of *Albugo*.
7. (a) How will you control the rust disease in wheat - Explain.
(OR)
(b) Describe the structure of the mature sporophyte of *Anthoceros*.
8. (a) Summarize the economic importance of Annonaceae.
(OR)
(b) Produce the economic importance of Brassicaceae.
9. (a) Narrate the vegetative characteristics of Poaceae.
(OR)
(b) State the binomial names of any three medicinal plants belong to Acanthaceae.

Cont...

10. (a) Outline the significance of photosynthesis.

(OR)

(b) Explain the cyclic photophosphorylation.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

11. (a) Outline the five kingdoms classification with merits and demerits.

(OR)

(b) Discuss the structure of *Aspergillus*.

12. (a) Examine the Tikka diseases of groundnut with reference to its causal organism, symptoms and control measures.

(OR)

(b) Discuss the reproduction of *Cycas*.

13. (a) Outline the Bentham and Hooker's system of classification.

(OR)

(b) Elucidate the floral characters of Rubiaceae.

14. (a) Highlight the floral characters of family Euphorbiaceae and its economic importance.

(OR)

(b) Discuss the vegetative and floral characters of Orchidaceae.

15. (a) Outline the Calvin cycle.

(OR)

(b) Discuss the physiological role of auxins.

Z-Z-Z

END