

Exam Date &amp; Time: 26-Sep-2020 (10:00 AM - 01:30 PM)



## PSG COLLEGE OF ARTS AND SCIENCE

Note: Writing 3hrs: Checking & Inserting Image : 30mins

**BSc DEGREE EXAMINATION MAY 2020**  
(Sixth Semester)

Branch - Biochemistry

**PLANT BIOCHEMISTRY [14BCV24]**

Marks: 75

Duration: 210 mins.

### SECTION A

Answer all the questions.

- 1) Name the two photosystems and their significance. (2)
- 2) What is the absorption range of chlorophylls? (2)
- 3) Give two examples of CAM plants. (2)
- 4) What is the first reaction in C<sub>4</sub> cycle? (2)
- 5) Define ammonification. (2)
- 6) What is PAPS? (2)
- 7) Give the structure of ABA. (2)
- 8) Name the enzymes involved in biosynthesis of ethylene. (2)
- 9) Define dormancy. (2)
- 10) Name the lipids stored in seeds. (2)

### SECTION B

Answer all the questions.

- 11) Outline a note on photosynthetic pigments. (5)
  - a) (5)
- [OR] Write a note on Emerson effect. (5)
  - b)

- 12) Give an account on synthesis and degradation of sucrose. (5)
- a)  
[OR] Briefly discuss the CAM cycle. (5)  
b)
- 13) Write a note on nitrate reduction. (5)
- a)  
[OR] Briefly discuss the nutrient role and deficiency symptoms of sulphur. (5)  
b)
- 14) Describe the physiological functions of cytokinins. (5)
- a)  
[OR] List the physiological functions of ethylene. (5)  
b)
- 15) Elaborate the methods of breaking dormancy. (5)
- a)  
[OR] Explain the biochemical changes during germination. (5)  
b)

### SECTION C

Answer 3 out of 5 questions.

- 16) Bring out the hill reaction. (10)
- 17) Discuss the reactions of  $C_3$  cycle. (10)
- 18) Write an essay on symbiotic nitrogen fixation in legumes. (10)
- 19) Summarise the synthesis and physiological functions of indole acetic acid. (10)
- 20) Explain the physiology of seed germination. (10)

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