PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS) -

BSc DEGREE EXAMINATION MAY 2017
(Sixth Semester)

Branch- BIOCHEMISTRY

PLANT BIOCHEMISTRY

Time : Three Hours Maximum : 75 Marks

SECTION-A *(20* Marks!
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 2 = 20)

1 What is hill reaction?
2 What are photosynthetic pigments?
3 Define C_3 cycle.
4 Give any two significance of CAM.
5 Define non-symbiotic N_2 fixation.
6 What is nitrate reduction?
7 Mention any two function of ethylene.
8 Write the physiological role of auxin.
9 Define seed dormancy.
10 What is meat by germination?

SECTION - B (25 Marksi
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

1 1 a Write briefly about photosytem I and II.
OR
b Describe the structure of chloroplast.

12 a Discuss C_4 (Hatch - stack) pathway.
OR
b Comment on starch degradation in plants.

13 a Explain nitrogen cycle.
OR
b Write short notes on sulfur metabolism.

14 a Explain the biosynthesis of auxin.
OR
' b Out line physiological function of cytokinins.

15 a Give brief account on dormancy.
OR
b Explain the glyonylate cycle.

SECTION - C (30 Marks!
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 Explain the cyclic and non-cyclic photophosphorylation mechanisms of photosynthesis.

17 Describe the C_3 Calvin's cycle with a neat sketch.

18 Discuss the mechanism of nitrogen fixation in leguminous plant.

19 Explain biosynthesis and physiological function of ethylene.

20 Give an account of seed germination.