BOT - 121

GOVERNMENT COLLEGE (AUTONOMOUS), RAJAHMUNDRY

II year B.Sc., Program Examinations at IV Semester End Botany Paper – 4: Plant Physiology and Metabolism Model Question Paper (w.e.f. 2018-19)

Time: 3 Hrs. Max. Marks: 50

Section - A

 $4 \times 5 = 20$

M

Answer any Four of the following questions. Draw diagrams wherever necessary.

- 1. Imbibition
- 2. General characteristics of enzymes
- 3. Emerson enhancement effect
- 4. Crassulacean Acid Metabolism
- 5. Anaerobic respiration
- 6. C4 Cycle
- 7. Sigmoid growth curve
- 8. Vernalization

Section – B

3 x 10=30 M

Answer any <u>Three</u> of the following questions. Draw neat labeled diagrams wherever necessary.

- 9. Discuss the concept and components of water potential.
- 10. Describe the mechanism of enzyme action.
- 11. Write an essay on non-cyclic photophosphorylation.
- 12. Write an essay on the Classification of lipids
- 13. Write an essay on the physiological effects of Gibberellins.

BOT - 121

GOVERNMENT COLLEGE (AUTONOMOUS), RAJAHMUNDRY

II B.Sc., Botany Practical Examinations at the end of IV Semester (Plant Physiology and Metabolism)

Botany Model Practical Question Paper - IV (w.e.f. 2018-19)

Time: 3 hours Max.Marks:50

1. Experiment 'A' Major experiment from Plant-Water relations /Plant metabolism

15 M

Scheme of valuation: Aim, principle and procedure – 5 M

Conduct of experiment – 6M

Report of result and inference – 4 M

2. Experiment 'B' Minor experiment

07 M

Scheme of valuation: Aim, principle and procedure – 5 M

Report of result and inference – 2 M

3. Scientific observation and data analysis

4 x 5=20 M

- **D.** Plant Water relations
- E. Mineral nutrition and Enzymes
- F. Plant metabolism
- **G.** Plant growth and development

Scheme of valuation: Identification -1 M + Diagram - 1 M + Reasons/analysis - 3 M

4. Record Viva-voce

5 + 3 = 8 M