



MBT-003-1144002 Seat No. _____

M. Sc. (Botany) (Sem. IV) (CBCS) Examination

April / May - 2018

BOT - 420 : Plant Physiology & Metabolism

(Old Course)

Faculty Code : 003

Subject Code : 1144002

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- 1** Answer the following : (any **seven**) **14**
- What is abscission ?
 - What is photoperiodism ?
 - What is morphogenesis in plants ?
 - What is kranz anatomy' ?
 - Explain stomatal classification in brief.
 - What is non- cyclic photophosphorylation ?
 - What is diffusion pressure in plants ?
 - Give importance of accessory pigments in photosynthesis.
 - Explain photolysis in brief
 - What are plastids ?
- 2** Answer the following : (any **two**) **14**
- Describe physiological functions of macro nutrients.
 - Explain influence of drought on growth and metabolism of plants.
 - Write a short note on water potential.
- 3** Answer the following : (Compulsory Questions) **14**
- What is seed viability ? Explain in detail.
 - Explain vernalization in detail

OR

- 3** Answer the following : (Compulsory Questions) **14**
- a. Write short note on Dormancy.
 - b. Explain phenomenon of growth and morphogenesis in plants.
- 4** Answer the following : **14**
- a. Explain C3 cycle in detail.
 - b. Give importance of C4 cycle in plants.
- 5** Answer the following : (any two) **14**
- a. Write the short note on photorespiration.
 - b. Explain phenomenon of senescence in detail.
 - c. Write short note on Kreb's cycle.
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