

E 422-2

# M.Sc. Semester - II Theory Examination

## BOTANY

Time: 03 hours

BOT- 409: Plant Physiology

Total marks : 70

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Instruction: All questions are compulsory and write your Answer no. properly in answer sheet as per given Question number. All question carry equal marks.

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**Que.1: Describe.**

- |                               |    |                                      |      |
|-------------------------------|----|--------------------------------------|------|
| a). Path of water adsorption. | OR | a). Mechanism of transpiration       | (07) |
| b). Catabolism of Starch      | OR | b). Deficiency symptoms of Nitrogen. | (07) |

**Que.2: Explain.**

- |   |    |                                    |      |
|---|----|------------------------------------|------|
| a). Light factor affecting Photosynthesis.    | OR | a). Significance of Respiration.   | (07) |
| b). Salient features of C <sub>3</sub> cycle. | OR | b). Salient features of TCA cycle. | (07) |

**Que.3: Describe.**

- |                                     |    |                                    |      |
|-------------------------------------|----|------------------------------------|------|
| a). Factors affecting plant Growth. | OR | a). Chemical nature of Auxin.      | (07) |
| b). Biosynthesis of Gibberellin.    | OR | b). Commercial use of Gibberellin. | (07) |

**Que.4: Describe.**

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|-----------------------|----|--------------------------------------|------|
| a). Long day plants.  | OR | a). Short day plants                 | (07) |
| b). Drought tolerance | OR | b). Mechanism of drought resistance. | (07) |

**Que.5: Give Answer in short of following Questions:**

(14)

- Which micronutrient deficiency causes accumulation of urea in plants ?
  - The special chlorophyll is called \_\_\_\_\_ in photosystem-II
  - What is Grana ?
  - Which enzyme catalyzed reaction of to form 3-phosphoglyseraldehyde.?
  - Give three Names of Polysaccharides.
  - What is Glycolysis ?
  - Krebs cycle is take place in \_\_\_\_\_.
  - Which plant growth hormone is used for Callus Proliferation?
  - What is florigen?
  - Heat is \_\_\_\_\_ strain in stress physiology ( Elastic/Plastic )
  - What is Arc auxanometer ?
  - Give full form of NAA auxin type.
  - What is Emerson enhancement effect?
  - What are end products of Aerobic respiration?
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