

VI Semester B.Sc. Examination, May/June 2018  
(CBCS) (Fresh + Repeaters) (2016-17 and Onwards)  
BOTANY - VIII  
Plant Physiology - II

Time : 3 Hours

Max. Marks : 70

- Instructions :** 1) Answer **all** questions.  
2) Draw diagrams **wherever** necessary.

PART - A

A. Explain/Define **any ten** of the following in **two** or **three** sentences : (10×2=20)

- 1) Name any two nitrogen containing macromolecules of a cell.
- 2) Differentiate a co-factor from a co-enzyme.
- 3) What is ammonification ?
- 4) Name two synthetic auxins.
- 5) Draw the sigmoid growth curve.
- 6) What are secondary metabolites ? Give one example.
- 7) What are tropic movements ? Give an example.
- 8) What is terminal oxidation ?
- 9) What is an active site ?
- 10) Why is Calvin cycle also known a C<sub>3</sub> pathway ?
- 11) What are vitamins ? Give the chemical name of any one vitamin.
- 12) Expand :
  - i) RuBP
  - ii) RuBISCO.

**BMSCW**



## PART - B

B. Explain critical notes on **any four** of the following :

(4×5=20)

- 13) Enzyme kinetics
- 14) Synthesis of amino acids
- 15) Factors affecting respiration
- 16) Emerson-enhancement effect
- 17) Cytokinins
- 18) Classification of enzymes.

## PART - C

C. Give a comprehensive account of **any three** of the following :

(3×10=30)

- 19) Explain the light reaction of photosynthesis.
- 20) Explain Kreb's cycle.
- 21) Give an account of photoperiodism and phytochrome.
- 22) What are the physiological effects of auxins ?
- 23) What is symbiotic nitrogen fixation ? Explain with reference to legume-Rhizobia interaction.