DPP-1374
M. Sc. (Bioscience) (Sem. II) Examination
March / April - 2016
BIOS-203 : Organismic Physiology

Time : 3 Hours] [Total Marks : 70

Instructions :

(1) Figures to the right indicate full marks.

(2) Draw neat and labeled diagrams wherever necessary.

1 Answer the following questions : (any two) 18
   (a) Explain microbial stress-response physiology.
   (b) Explain the various strategies of cell division in bacteria.
   (c) Explain the role of microorganisms in N₂ fixation.

2 Answer the following questions : (any two) 18
   (a) Discuss electron transport chain (ETC).
   (b) Elaborate on CAM photosynthesis pathway.
   (c) Elaborate on photosynthesis in bacteria.
3 Answer the following questions: (any two)

(a) Discuss the major physiological effects of gibberellins.

(b) What are synthetic cytokinins? Explain the physiological effect of cytokinins.

(c) Explain the human blood group system.

4 Attempt any two questions:

(a) Write a note on structure and function of haemoglobin.

(b) Explain excitatory synapse.

(c) Discuss neuroanatomy of the human brain.