2019

B.Sc.

1st Semester Examination

BOTANY (Honours)

Paper - C 2-T

Full Marks : 40 Time : 2 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.
Illustrate the answers wherever necessary.

1. Answer any *five* of the following : 2×5=10

(a) Write the significance of chemical bonds?

(b) Define Oligosaccharides. Cite an example.

(c) What is Golgi apparatus?

(d) What is buffer solution?

(e) Write the Michaelis-Menten equation.

(f) Define endosymbiotic theory.

[Turn Over]

(g) What does it mean by induced fit theory?

(h) Mention the function of protein kinase.

2. Answer any *four* of the following : 5×4=20

(a) Schematically represent the triglyceride structure and state its function. What is ester? 2+1+2

(b) Write the chemical structure of cell wall and mention function of plant cell wall. 2½+2½

(c) Describe the regulation of cell-cycle check point. 5

(d) Write a note on the structure and function of nucleotides. 3+2

(e) Briefly describe the fluid mosaic model of plasma membrane. 5

(f) What is ER? Mention its types and function? 2+1+2

3. Answer any *one* of the following : 10×1=10

(a) (i) Describe in brief the different types of membrane transport found in living organism. 6+4

(ii) Write the molecular organisation of chromatine.

(b) Classify enzymes with examples on the basis of modern concept. What are allosteric enzymes? 8+2
