No. of Printed Pages : 4

Sem-I-Bot-CC-II
(Reg&Back)

2020-21

Time - 3 hours

Full Marks - 60

*Answer **all groups** as per instructions.*
Figures in the right hand margin indicate marks.
Draw labelled diagrams wherever necessary.

GROUP – A

1. Fill in blanks. (all) [1 × 8

(a) Branch of science that deals with energy kinetics of living systems is known as _____.

(b) Many biological reactions occur in the medium of _____.

(c) Proteins are built of 20 kinds of smaller subunits called _____.

(d) Fats and oils are formed by combination of Fatty acids with _____.

(e) Enzymes catalysing intramolecular arrangements are called _____.

(f) The stage of cell cycle in which the DNA content is doubled is called _____.

P.T.O.

(g) Karyolymph is present in _____.

(h) During the Interphase, _____ has no check points.

GROUP – B

2. Write notes on any eight of the following within two to three sentences each. [1½ × 8

(a) Entropy

(b) Free Energy

(c) pH

(d) Monosaccharides

(e) RNA

(f) Chiasma

(g) Endocytosis and Exocytosis

(h) Nucleolus

(i) Peroxisome

(j) Interphase

GROUP – C

3. Write notes on any eight of the following within 75 words each. [2 × 8

(a) 2nd Law of Thermodynamics

(b) Buffer solution

(c) Classification of Enzymes

(d) Disaccharides

(e) Isoelectric point

(f) Cell Membrane

(g) Golgi apparatus

(h) Microtubules

(i) Mitochondria

(j) Regulation of cell cycle

GROUP – D

*Answer **any four** questions within 500 words each.*

4. Describe different types of Enzyme Inhibition and factors affecting enzyme activity. [6

5. Give an account of the structure and functions of polysaccharides. [6

6. What are Fatty acids ? Write the differences between saturated and unsaturated Fatty acids. [6

7. Describe the chemistry, structure and function of plant cell wall. [6

8. Describe the structure and functions of Nucleus. [6

9. Describe the structure and functions of Chloroplast. [6

10. Describe various stages of Meiosis-I. [6