

DE-118
December-2022
B.Sc., Sem.-III
CC-202 : Biochemistry

Time : 2½ Hours]

[Max. Marks : 70

- Instructions :** (1) All questions carry equal marks.
(2) Draw diagram wherever necessary.

1. (a) Discuss the fluid Mosaic structure of plasma membrane. 8
(b) State difference between prokaryotic and eukaryotic cell. 6
- OR**
- (a) Discuss the structure of Nucleus. 9
(b) Discuss the functions of Golgi bodies. 5
2. (a) Explain sliding filament theory of muscle contraction. 8
(b) Discuss the functions of Muscles. 6
- OR**
- (a) Explain : The transmission of a nerve impulse. 8
(b) Discuss : Bone Remodeling. 6
3. (a) Discuss : The physiological action of Insulin. 6
(b) Draw the structure, name the dietary sources, deficiency disease and three functions of Vitamin C. 8
- OR**
- (a) Write a note on Thyroid hormones. 8
(b) Name the dietary sources, draw the structure and state two roles of Riboflavin. 6

4. (a) Draw label and explain the structure of heart. Name the two types of circulations and give their functions.

8

(b) Write a note on : Cardiac output.

6

OR

(a) Discuss in details the events of cardiac cycle.

7

(b) Write a note on Blood pressure.

7

5. Answer the followings : (any seven)

14

(1) What is cell fractionation ?

(2) Draw and label the structure of Mitochondria.

(3) State any two functions of lysosomes.

(4) Define : Resting potential and action potential.

(5) Name the proteins of Muscles.

(6) What is Hydroxyapatite ? Write its formula.

(7) Define : Hormones & Vitamins.

(8) Name the coenzyme forms of Niacin.

(9) State what is Diabetes mellitus and Goiter.

(10) Define : Blood capillaries and plasma.

(11) Name the junctional tissue.

(12) List two important properties of cardiac Muscle. State full form of ECG.