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PAR-1603120102020500 Seat No. _____

M. Sc. (Biochemistry) (Sem. II) (CBCS) Examination

August / September - 2020

CBC-5 : Human Physiology and Endocrinology

Time : **2.30** Hours] [Total Marks : **70**

1 Answer briefly any **seven** of the following questions : **14**

(1) Write functions of external and internal nose.

(2) State the significance of zymogen secretion during digestion.

(3) Definitions: Peristalsis, Cholelithiasis

(4) Draw only figure: internal anatomy of kidney

(5) Give the classification of nervous system

(6) Enumerate various disorders of stomach. Write in brief about peptic ulcers.

(7) Explain Henry's law.

(8) Brief introduction about motor unit

(9) How thyroid hormone synthesis is controlled?

(10) Explain biphasic effect of glucose.

2 Answer any **two** of the following questions : **14**

(1) Discuss the lung volumes and capacities with Spirogram.

(2) Give composition of salivary, gastric and intestinal secretions with their functions.

(3) Explain in brief about neuromuscular junction.

3 (1) Give an overview of smooth muscle tissue. **7**

(2) Write down hormonal regulation of blood pressure. **7**

OR

3 (1) Describe mechanism of gastric juice secretion. **7**

(2) Discuss in detail: Buffer system of the body for maintenance of acid and base balance. **7**

4 Answer the following questions : **14**

(1) Which are the layers of GI tract? Explain in detail with diagram.

(2) Describe the effects of insulin and glucagon.

5 Answer the following questions : (Any **Two**) **14**

(1) Enlist various parts of an ear. Briefly discuss role of middle ear and explain physiology of hearing with necessary illustrations.

(2) Write a note on introduction and functions of hormones from posterior pituitary.

(3) Describe the reproductive hormones of males and females along with their functions and regulation by hypothalamus.

(4) Draw and briefly discuss about the different waves of electrocardiogram.
