

PSG COLLEGE OF ARTS & SCIENCE
< AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(Fifth Semester)

Branch - **BIOCHEMISTRY**

CORE ELECTIVE - I: PHYSIOLOGY AND ENDOCRINOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10x2 = 20)

- 1 What is chloride shift?
- 2 List out the blood buffer systems.
- 3 What is cardiac cycle?
- 4 Draw the structure of nephron and its functions.
- 5 Define the term Soma and its function.
- 6 List the role of photosensitive cells and its function.
- 7 What is Rickets?
- 8 Mention the role of para thyroid hormone.
- 9 List out the abnormalities of testosterone.
- 10 Name the hormones which are secreted from posterior pituitary gland.

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Explain the digestion and absorption of carbohydrates in the small intestine.

OR

- b Write a note on process of respiratory systems.

- 12 a Explain the normal ECG wave pattern and its significances.

OR

- b Discuss the role of renal regulation of acid-base balance.

- 13 a Explain the role of Rod's and Cones in visual cycle.

OR

- b Explain the structure and function of Neuron.

- 14 a Explain the action of insulin and somatostatin.

OR

- b How are hormones classified?

- 15 a What are the effects of progesterone?

OR

- b Explain various testicular abnormalities.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 How is O_2 carried from lungs to different tissues?
- 17 Explain the mechanism of urine formation.
- 18 Discuss the composition and functions CSF.
- 19 Explain the mechanism of CAMP mediated action of hormones.
- 20 Describe the role of hormones secreted by adenohypophysis.