

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION MAY 2019  
(Fifth Semester)

Branch - BIOCHEMISTRY

**CORE ELECTIVE -1 PHYSIOLOGY & ENDOCRINOLOGY**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks!)**

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 What is respiration?
- 2 Mention the principle of absorption of carbohydrate by small intestine.
- 3 Draw the structure of nephron and give its functions.
- 4 What is QRST ventricular complex?
- 5 Name the inhibitor of neuro transmitters.
- 6 How the neurons classified based on their functions?
- 7 List out the hormones released from pancreas.
- 8 What is goitre?
- 9 Define menstrual cycle.
- 10 Name the function of relaxin.

**SECTION - B (25 Marks!)**

Answer ALL Questions

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

- 11 a Explain blood grouping and add a note on Rh factors.  
OR  
b Write a note on (i) Bohr's effects (ii) Chloride shift.
- 12 a Write an account on muscle proteins.  
OR  
b Discuss on the electro cardiogram.
- 13 a Explain the synapatic function and its role.  
OR  
b Draw the structure and functions of eye.
- 14 a Explain the mechanism of action of thyroid hormones.  
OR  
b Describe the patho physiology of pancreas hormones.
- 15 a Discuss on the functions of Ovary.  
OR  
b Focus on function and secretion of hypothalamous hormone.

**SECTION - C (30 Marks)**

Answer any THREE Questions

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

- 16 How is O<sub>2</sub> carried from lungs to different tissues?
- 17 Describe the mechanism of urine formation.
- 18 Explain the mechanism of cholinergic transmission on CNS.
- 19 Brief out various second messengers and its actions.
- 20 Discuss on the secretion, functions of adeno hypophysis hormones.