

**BSc DEGREE EXAMINATION DECEMBER 2017**  
(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 Define Bohr's effect.
- 2 Write a note on composition and function of blood.
- 3 List out muscle proteins and its functions.
- 4 Draw neat diagram of nephron and its function.
- 5 Write a note on neurotransmitters.
- 6 Discuss about photo pigments.
- 7 List out second messengers and its role (functions).
- 8 Write the structure and function of CAMP.
- 9 List the hormones of Hypothalamus.
- 10 Enumerate on the functions of testis.

**SECTION - B (25 Marks)**

Answer **ALL** Questions

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

- 11 a Explain the components of respiratory systems and their function.  
OR  
b Write an account on the blood clotting mechanisms.
- 12 a Explain the acid - base regulation by kidney's.  
OR  
b Explain the mechanism of muscle contraction.
- 13 a Elaborate the receptor mechanisms of the eye,  
OR  
b Discuss on synaptic transmission.
- 14 a Write a short notes on general mechanism of hormone action.  
OR  
b Describe the biosynthesis of thyroid hormone with its abnormalities.
- 15 a Describe the chemistry mechanisms of action and role of MSH.  
OR  
b Enumerate the functions of testis.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

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

- 16 Write an essay on the composition and functions of digestive juices.
- 17 Write an account on the mechanism of urine formation.
- 18 Outline the composition and function of CSF.
- 19 Discuss the role of second messengers in normal action.
- 20 Explain in detail about pituitary hormones and their function.