

S.No. 13

12PBC09

(For the candidates admitted from 2012–2013 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Fourth Semester

Biochemistry

HUMAN PHYSIOLOGY AND ENDOCRINOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Write the structure and functions of G-protein coupled receptor.

Or

- (b) What is feed back regulation? Explain with example.

2. (a) Explain the physiological role of thyroid hormones.

Or

- (b) Write the synthesis and biological functions of parathormone.

3. (a) Discuss the mode of action and biological effects of testosterone.

Or

(b) Explain the functions of various Gastrointestinal hormones.

4. (a) Write the mechanism of breathing.

Or

(b) How carbohydrates undergo digestion and absorption?

5. (a) Explain the phases of menstrual cycle.

Or

(b) Write short notes on Neurotransmitter.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) Explain the signal transduction mechanism of Ca^{2+} and phosphoinositol.

Or

(b) Discuss in detail on mode of action of peptide hormones.

7. (a) Explain hypophysiotropic hormones.

Or

(b) Write the functions of various anterior pituitary hormones.

8. (a) Discuss in detail on mechanism of action of pancreatic hormones.

Or

(b) Elaborate the biosynthesis and pathophysiology of androgens.

9. (a) Explain the mechanism of blood coagulation.

Or

(b) Discuss the functions of different components of blood.

10. (a) Explain the hormonal and physiological changes during pregnancy.

Or

(b) Write in detail on hormones of testes and ovaries.