

C 21110

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2017

(CUCBCSS—UG)

Zoology

ZOL 6B 11—PHYSIOLOGY AND ENDOCRINOLOGY

Time : Three Hours

Maximum : 80 Marks

A. Answer *all* questions. Each carries 1 mark :

- 1 Name *two* fat soluble vitamins.
- 2 Name a respiratory pigment present in muscles.
- 3 What is haemolysis ?
- 4 What is myocardial infarction ?
- 5 Name two proteins involved in muscle contraction.
- 6 Name a disease caused by the deficiency of Vitamin C.
- 7 Name one steroid hormone and one peptide hormone.
- 8 What is "insulin shock" ?
- 9 Name the most numerous leucocyte.
- 10 Which hormone is called "fight or flight hormone" ? Name the gland that secretes it.

(10 × 1 = 10 marks)

B. Answer any *ten* questions in two or three sentences each. Each carries 2 marks :

- 11 What is a balanced diet ?
- 12 What is haemostasis ?
- 13 Distinguish between neurogenic and myogenic hearts.
- 14 Differentiate osmoconformers and osmoregulators.
- 15 What is exophthalmic goitre ? How is it caused ?
- 16 Comment on glial cells.
- 17 Give two functions of testosterone.
- 18 Explain blood transfusion.

Turn over

- 19 Distinguish between hypotension and hypertension.
- 20 What is Bohr effect ?
- 21 Differentiate gonadial hormones and gonadotrophic hormones with examples.
- 22 What is diabetes insipidus? How is it caused ?

(10 × 2 = 20 marks)

C. Answer any *five* questions in not more than a paragraph each. Each carries 6 marks :

- 23 Describe the hormonal control of digestion in the stomach.
- 24 Explain the Oxygen dissociation curve and its significance.
- 25 Describe the composition of human blood.
- 26 Explain ammonotelism, ureotelism and uricotelism with examples.
- 27 Describe Cori cycle.
- 28 Describe the structure of a synapse with a labelled sketch.
- 29 Write notes on ECG.
- 30 Explain the role of sex hormones in menstrual cycle.

(5 × 6 = 30 marks)

D. Write essays on any *two* of the following. Each carries 10 marks :

- 31 Describe the physiology involved in the transmission of nerve impulses. Illustrate your answer with suitable sketches.
- 32 Discuss the manner of osmotic regulation in marine and freshwater fishes.
- 33 Describe the process of urine formation in man using suitable diagrams.
- 34 Give an account of the hormones of pituitary gland and briefly explain their functions.

(2 × 10 = 20 marks)