

Reg. No. :

Code No. : 30385 E Sub. Code : AMZO 53

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2022.

Fifth Semester

Zoology — Core

ANIMAL PHYSIOLOGY AND BIOCHEMISTRY

(For those who joined in July 2020 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer

Fructose can be more harmful than

- (a) glucose (b) starch
(c) maltose (d) None of the above

Lecithin is a mixture of _____ that are essential to cells in the human body

- (a) glycoprotein (b) mucoprotein
(c) lipo protein (d) fats

The individual bundles of muscle fibers in a skeletal muscle are known as _____

- (a) fasciculi. (b) muscle system
(c) vesicular (d) all the above

Hyperthyroidism are associated with

- (a) weight gain
(b) weight loss
(c) no loss or gain
(d) all the above

Menopause is the time that marks the _____ of your menstrual cycles.

- (a) starting (b) stoppage
(c) no change (d) all the above

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

- (a) Describe the classification and types of protein?

Or

- (b) Elucidate the cholesterol structure and function?

3. Digestion is the breakdown of large insoluble food molecules into small water-soluble food molecules with help of

- (a) enzyme (b) hormone
(c) HCL (d) all the above

4. _____ is the process of storing excess glucose for use by the body at a later time

- (a) Glycogenesis (b) Glycogenolysis
(c) Glycolysis (d) none of the above

5. _____ is the chemical process by which organic compounds release energy

- (a) respiratory pigment
(b) Respiration
(c) part of lungs
(d) all the above

6. Atherosclerosis is the build-up of fats _____ and other substances in and on the artery walls

- (a) protein (b) cholesterol
(c) carbohydrate (d) all the above

7. Synapses refer to the points of contact between _____ where information is passed from one neuron to the next.

- (a) muscle (b) neurons
(c) muscle shorting (d) all the above

Page 2 Code No. : 30385 E

12. (a) Express the role of enzymes in digesting carbohydrates?

Or

- (b) Summarise the different steps in glycogenesis?

13. (a) Describes the generalise structure of human kidney.

Or

- (b) Write short notes on ECG.

14. (a) Discuss about the structure and function of skeletal muscles?

Or

- (b) What are the steps involved in neuromuscular transmission?

15. (a) List out is the structure and function of pituitary gland?.

Or

- (b) What are the three stages of the menstrual cycle?

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) What are essential and non essential amino acid gives example?

Or

- (b) Describe the structure and function of glycoprotein.

17. (a) List out the main steps and results of the Krebs cycle?

Or

- (b) Write the various types of absorption of digested food in your body?

18. (a) How is CO₂ and O₂ transported during respiration?

Or

- (b) What are the three major processes involved in Urine Formation?

19. (a) Explain the different steps of the sliding filaments theory?

Or

- (b) Summarize the various stages of nerve conduction?

Page 5 Code No. : 30385 E

20. (a) Write about the difference between ovaries and testes?

Or

- (b) Describe the role of hormones play in the menstrual cycle?

Page 6 Code No. : 30385 E