(6 pages)

Reg. No. :

Code No.: 7606

Sub. Code: KZOM 31/

PZOM 31

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2019.

Third Semester

Zoology

ANIMAL PHYSIOLOGY

(For those who joined in July 2016 and afterwards)

Time: Three hours

Maximum: 75 marks

PART A - (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer:

- The key enzyme in the regulation of fatty acid synthesis is
 - (a) Acetyl coA carboxylase
 - (b) AMP activated proteinkinase
 - (c) Protein phosphatase
 - (d) None of the above

- The major protein constituent of high density lipoprotein (HDL)
 - (a) Apolipoprotein A-1
 - (b) Apolipoprotein C-1
 - (c) Apolipoprotein E
 - (d) None of the above
- In left side of the heart which one is responsible for pumping
 - (a) Oxygenated blood to the lungs
 - (b) Oxygenated blood to the body
 - (c) Deoxygenated blood to the body
 - (d) Deoxygenated blood to the lungs
- 4. The main structure of the integumentary system is
 - (a) Brain
- (b) Lungs
- (c) Heart
- (d) Skin
- The system that enables support the body and protect internal organ is
 - (a) Reproductive system
 - (b) Skeletal system
 - (c) Respiratory system
 - (d) Circulatory system

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- The main passageway that Leads to the lungs from the throat is
 - (a) Pharynx
- (b) Epiglottis
- (c) Esophagus
- (d) Trachea
- 7. The neuron cell made up of the following parts
 - (a) Dendrite
- (b) Axon
- (c) Nucleus
- (d) All of the above
- 8. The common neurotransmitters include
 - (a) Acetylcholine
- (b) GABA
- (c) Serotonin
- (d) All of the above
- 9. Insulin is represented as a
 - (a) Vitamin
- (b) Lipid
- (c) Enzyme
- (d) Hormone
- 10. Leydig's cells present in
 - (a) Ovary and estrogen
 - (b) Liver and cholestrol
 - (c) Pancreas and glycogen
 - (d) Testis

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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 250 words

11. (a) Explain the importance of carbohydrates.

Or

- (b) Explain the process of digestion in human beings.
- (a) Explain the general circulation system of fish.

Or

- (b) Give a brief note on the structure of arteries and veins.
- (a) Explain the process of gas movement through respiration membrane surface.

Or

- (b) Give an account on the hormonal control of Osmoregulation.
- 14. (a) Neurotransmitters- Discuss.

Or

(b) Give an account on the structure and function of sensory organs.

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[P.T.O.]

(a) Comment on excretory organs and their functions.

Or

(b) Describe the structure and function of thyroid gland.

PART C - (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words

(a) Explain in detailed about protein metabolism.

Or

- (b) Describe the importance of vitamins and minerals with regard to human health.
- 17. (a) Illustrate the structure and function of human heart with suitable illustration.

Or

- (b) Give an account on circulatory system in human.
- (a) Explain the structure and function of human lung with suitable illustration.

Or

(b) Explain-Renal failure and Dialysis.

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 (a) Explain the types and mechanism of muscular contraction.

Or

- (b) Write an essay on EEG.
- (a) Write an essay on the functional interactions and metabolism of hormones.

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(b) Give an elaborate account on the neuroendocrine regulation of reproduction.

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