

Reg. No. :

Name :

**V Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2025
(2019 to 2023 Admissions)
CORE COURSE IN ZOOLOGY
5B06ZLG : Animal Physiology**

Time : 3 Hours

Max. Marks : 40

Instruction : Give illustrations and figures wherever necessary.

- I. Essay questions (**Each** question carries 8 marks). Answer any two. (2×8=16)
- 1) Write an essay on mechanism of blood clotting.
 - 2) Explain the physiological and biochemical events involved in muscle contraction.
 - 3) Describe transport of respiratory gases in man.
 - 4) With suitable examples, explain the mechanism of hormone action.
- II. Short essay (**Each** question carries 4 marks). Answer any two. (2×4=8)
- 5) Explain the counter current system in the kidney, highlighting the roles of the counter current multiplier and counter current exchanger in urine concentration.
 - 6) What are neurotransmitters ? Add notes on any three neurotransmitters.
 - 7) Describe the various phases of the uterine cycle in the menstrual cycle, highlighting the hormonal control and changes in the endometrium.
- III. Short answer questions (**Each** question carries 2 marks). Answer any six. (6×2=12)
- 8) List out any four functions of connective tissue.
 - 9) What is saltatory transmission ?

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K25U 2371

-2-



- 10) Comment on PEM.
 - 11) What is SA node ? Add notes on its function.
 - 12) Illustrate ornithine cycle.
 - 13) Explain the endocrine activity of pancreas.
 - 14) Give a brief account on cartilage.
 - 15) Differentiate between tolerance and resistance in environmental physiology.
- IV. Multiple choice questions (**Each** question carries 0.5 mark). Answer all. (8×0.5=4)
- 16) Which of the following is not a gastrointestinal hormone ?

a) Gastrin	b) Adrenaline
c) Cholecystokinin	d) Serotonin
 - 17) A symport transport system moves

a) Two molecules in opposite directions	b) A single molecule in one direction
c) Two molecules in the same direction	d) A single molecule in both directions
 - 18) QRS complex in ECG represents

a) Atrial depolarization	b) Ventricular depolarization
c) Ventricular repolarization	d) Atrial repolarization
 - 19) The Cori cycle occurs primarily between

a) Liver and kidney	b) Liver and muscle
c) Liver and pancreas	d) Liver and lungs
 - 20) Hypoxia refers to

a) Increased oxygen delivery to tissues
b) Complete absence of nitrogen in blood
c) Increased blood carbon dioxide concentration
d) Decreased availability of oxygen to body tissues



-3-

K25U 2371

- 21) Select the abnormal constituent of urine from the following.

a) Ketone bodies	b) Urea	c) Uric acid	d) Chlorides
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- 22) Antidiuretic hormone is also known as

a) Oxytocin	b) Prolactin	c) Vasopressin	d) Growth hormone
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- 23) The primary function of Sertoli cells in the seminiferous tubules is

a) Production of seminal fluid
b) Storage of mature sperm
c) Secretion of testosterone
d) Providing nutritional support to developing sperm