



K23U 3455

Reg. No. :

Name :

**III Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2023**

(2019 to 2022 Admissions)

COMPLEMENTARY ELECTIVE COURSE IN ZOOLOGY

3C03 ZLG : Animal Physiology

Time : 3 Hours

Max. Marks : 32

I. Essay questions (**Each** question carries **6** marks.) Answer **any two**.

- 1) Explain the mechanism of urine formation in man.
- 2) Write on the receptors for the perception of light, pressure, smell, sound and temperature.
- 3) Give an account on the electrochemical changes during muscle contraction.
- 4) Describe the Ornithine cycle.

II. Short Essay (**Each** question carries **3** marks.) Answer **any two**.

- 5) Give a brief account on respiratory organs in animals.
- 6) Classify kidneys based on origin.
- 7) What is placenta ? Justify its role as an endocrine gland.

III. Short Answer questions (**Each** question carries **2** marks.) Answer **any six**.

- 8) Chlorocruorin
- 9) Name the four phases of menstrual cycle.
- 10) Neurogenic heart
- 11) Glial cells
- 12) ADH
- 13) Sodium Potassium pump
- 14) Hormones of pancreas
- 15) Parthenogenesis.

P.T.O.



IV. Multiple choice questions (**Each** question carries **0.5** mark.) Answer **all**.

16) Which of the following is a copper containing respiratory pigment ?

- A) Hemerythrin
- B) Haemoglobin
- C) Haemocyanin
- D) Chlorocruorin

17) Hypothyroidism at birth results in _____.

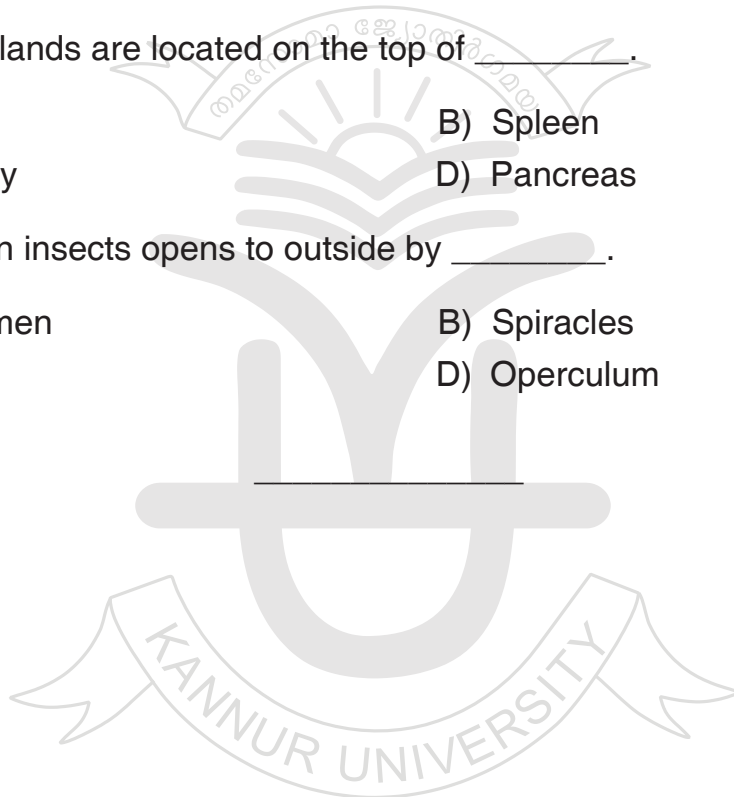
- A) Cretinism
- B) Myxoedema
- C) Acromegaly
- D) Gigantism

18) Adrenal glands are located on the top of _____.

- A) Liver
- B) Spleen
- C) Kidney
- D) Pancreas

19) Trachea in insects opens to outside by _____.

- A) Foramen
- B) Spiracles
- C) Ostia
- D) Operculum





K22U 3658

Reg. No. :

Name :

Third Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2022

(2019 Admission Onwards)

COMPLEMENTARY ELECTIVE COURSE IN ZOOLOGY

3C03ZLG : Animal Physiology

Time : 3 Hours

Max. Marks : 32

I. Essay Questions – Answer **any two**. (2×6=12)

- 1) Describe the role of different hormones in the female reproductive cycle.
- 2) Describe the conduction system of heart.
- 3) Write an essay on the transport of oxygen during gaseous exchange.
- 4) Describe the mechanism of impulse transmission across synapse.

II. Short Essay Questions – Answer **any two**. (2×3=6)

- 5) Describe the counter current mechanisms in the functioning of Kidneys.
- 6) Illustrate and explain the organization of myofibrils.
- 7) Differentiate neurogenic and myogenic heart.

III. Short Answer Questions – Answer **any six**. (6×2=12)

- 8) What is meant by glomerular filtrate ?
- 9) Which are the four phases of Menstrual cycle ?
- 10) Name the hormones secreted by the neurohypophysis.
- 11) Expand GABA.
- 12) Name the four chambers of ruminant stomach.
- 13) What is Chlorocruorin ?
- 14) What is corpus albicans ?
- 15) Differentiate voluntary and involuntary muscles.

P.T.O.



K22U 3658

(4×0.5=2)

IV. Multiple Choice Questions – **All questions compulsory.**

- 16) Secretion of Gastrin is stopped by
- a) Gastrin
 - b) Enterogastrone
 - c) Renin
 - d) Insulin
- 17) The contractile protein of the skeletal muscle involving ATPase activity is
- a) Myosin
 - b) Tubulin
 - c) Troponin
 - d) Tropomyosin
- 18) Recognize the hormone secreted by the pituitary gland that triggers the smooth muscle of the uterus to contract during parturition in animals
- a) Vasopressin
 - b) Oxytocin
 - c) Prolactin
 - d) Gonadotropins
- 19) Brush border is a characteristic feature of
- a) Neck of nephron
 - b) Collecting tube
 - c) Proximal convoluted tubule
 - d) All of the above

K20U 1855



Reg. No. :

Name :

**III Semester B.Sc. Degree CBCSS (OBE) – Regular
Examination, November 2020
(2019 Admission Only)
COMPLEMENTARY ELECTIVE COURSE IN ZOOLOGY
3C03 ZLG : Animal Physiology**

Time : 3 Hours

Max. Marks : 32

I. Essay questions. Answer **any two**. **(2×6=12)**

- 1) Explain the different methods of CO₂ transport in human body.
- 2) Briefly explain the menstrual cycle.
- 3) Give an account on the origin and transmission of nerve impulse.
- 4) Briefly explain the ultra structure of striated muscle fibre with the help of diagrams.

II. Short essay questions. Answer **any two**. **(2×3=6)**

- 5) Comment on the disorders due to the malfunctioning of thyroid gland.
- 6) Give an account on the process of urine formation.
- 7) Comment on the pace maker and conducting system of heart.

III. Short essay questions. Answer **any six**. **(6×2=12)**

- 8) Differentiate between micelles and chylomicrons.
- 9) What is diabetes mellitus ?
- 10) Name the chambers in the compound stomach of ruminants.
- 11) What is Jacobson's organ ?
- 12) Name two gastrointestinal hormones. Mention their functions.
- 13) What is the difference between ureotelmism and uricotelism ?
- 14) Name the different types of respiratory pigments seen in animals.
- 15) What is parthenogenesis ? Give example.

P.T.O.

IV. Multiple choice questions. **All questions compulsory.**

(4×0.5=2)

- 16) Which among the following hormone is secreted from the corpus luteum ?
- a) Testosterone
 - b) Oestrogen
 - c) Cortisol
 - d) Progesterone
- 17) Excretory organ seen in prawn is
- a) Antennary gland
 - b) Nephridia
 - c) Malpighian tubule
 - d) Flame cells
- 18) Pepsinogen is activated into pepsin by
- a) Amylase
 - b) Chymotrypsin
 - c) Hydrochloric acid
 - d) Cholecystokinin
- 19) Bipolar neurons are seen in
- a) Cochlea
 - b) Pancreas
 - c) Retina
 - d) Taste buds
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