



Seat No. _____

HA-003-2016022

B. Sc. (Sem. VI) Examination

April - 2023

Zoology : Z-602

***(Cardiovascular System, Respiration & Muscular System,
Endocrinology & Reproduction, Immunology &
Sense Organ & Histology)***

(New Course)

Faculty Code : 003

Subject Code : 2016022

Time : $2\frac{1}{2}$ / Total Marks : 70

Instructions :

- (1) Illustrate your answer with neat and labelled diagram.
- (2) Figure on the right side indicate full marks of the question.

- 1 (a) Give answer of following questions : 4
 - (1) The bulbus cordis developed into _____.
 - (2) Duration of cardiac cycle is _____ seconds.
 - (3) Define Diastolic blood pressure.
 - (4) Write a full name of SL valve.
- (b) Write any one out of two : 2
 - (1) Describe only systolic blood pressure.
 - (2) Write a brief note on Howell's theory.
- (c) Write any one out of two 3
 - (1) Write a note on conduction and regulation of heart beat.
 - (2) Describe internal structure of heart.
- (d) Write any one out of two : 5
 - (1) Give description of Cardiac cycle.
 - (2) Describe ECG.
- 2 (a) Give answer of following questions : 4
 - (1) Define respiratory pigment.
 - (2) Give the name of contractile protein.
 - (3) What is external respiration ?
 - (4) Write the name of responsible part of blood for transportation of O₂.

- (b) Write any one out of two : 2
 (1) Write a short note on haemoglobin.
 (2) Write function of muscular tissue.
- (c) Write any one out of two 3
 (1) Describe exchange of O₂.
 (2) Write a note on haemerythrin.
- (d) Write any one out of two : 5
 (1) Explain transport of gases.
 (2) Explain molecular structure of sarcomere.
- 3** (a) Give answer of following questions : 4
 (1) Which hormone is responsible for decreased production of urine ?
 (2) Perifollicular cells of pituitary is also known as a _____.
 (3) What is the main mechanism for regulating hormones secretion ?
 (4) Name the hormone which is responsible for Menstrual cycle.
- (b) Write any one out of two : 2
 (1) Write a note on classification of hormone.
 (2) Write a short note on hormone secreted by parathyroid.
- (c) Write any one out of two 3
 (1) Write a short note on estrus cycle.
 (2) Write a short note on hormone secreted by Pineal gland.
- (d) Write any one out of two : 5
 (1) Write a short note on hormones of Pituitary gland.
 (2) Describe phases and significance of menstrual cycle.
- 4** (a) Give answer of following questions : 4
 (1) How many chains are present in immunoglobulin structure ?
 (2) Write the name of primary taste.
 (3) Which immunity is known as a specific immunity ?
 (4) Give the examples of first line of defence.
- (b) Write any one out of two : 2
 (1) Write a note on innate immunity.
 (2) Draw only a labelled diagram of photo receptor.
- (c) Write any one out of two 3
 (1) Describe Adaptive immunity.
 (2) Describe in brief the structure of immunoglobulin.

- (d) Write any one out of two : 5
(1) Explain detailed structure of phono receptor.
(2) Make a description of different type of immunoglobulin.
- 5 (a) Give answer of following questions : 4
(1) Write a function of microtome.
(2) Give the name of simple fixatives.
(3) Why D.P.X. is used for mounting ?
(4) Write the name of zones in Adrenal gland.
- (b) Write any one out of two : 2
(1) What is the difference between Graafian follicle and Corpus luteum.
(2) Brief note on block preparation process.
- (c) Write any one out of two 3
(1) Explain Dealcoholisation process.
(2) Describe compound fixative.
- (d) Write any one out of two : 5
(1) Describe Histological structure of testis.
(2) Give account of different types of Stains.
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