



DCJ-003-2016022

Seat No. _____

B. Sc. (Sem. VI) (W.E.F. 2019) Examination

July - 2022

Zoology : Z-602

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

Faculty Code : 003

Subject Code : 2016022

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

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

- 1 (a) Give answer of following questions : 4
- (1) Write a location of pacemaker in heart.
 - (2) Which part of heart receive deoxygenated blood?
 - (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 blood circulation in heart.
- (c) Write any one out of two : 3
- (1) Write a note on theory of blood clotting (any one).
 - (2) Write a note on internal structure of heart.
- (d) Write any one out of two : 5
- (1) Give description of Cardiac cycle.
 - (2) Describe origin of heart.

- 2** (a) Give answer of following questions : **4**
- (1) Define respiratory pigment.
 - (2) Which respiratory pigments has haem as non-protein part?
 - (3) In oxygenated state haemocyanin has _____ in color.
 - (4) Write a name of responsible part of blood for transportation of O_2 .
- (b) Write any one out of two : **2**
- (1) Write a short note on haemerythrin
 - (2) Write function of muscular tissue.
- (c) Write any one out of two : **3**
- (1) Describe transport of CO_2 .
 - (2) Write a note on chlorocruorin.
- (d) Write any one out of two : **5**
- (1) Explain exchange of gases.
 - (2) Explain molecular structure of sarcomere.
- 3** (a) Give answer of following questions : **4**
- (1) What is endocrine gland?
 - (2) Write a name of stress hormone.
 - (3) Write name of hormone secreted by testis.
 - (4) Write a full name of ACTH.
- (b) Write any one out of two : **2**
- (1) Write a name and function of hormone secreted by pancreas.
 - (2) Write a short note on secreted by pineal gland.
- (c) Write any one out of two : **3**
- (1) Write a short note on estrus cycle.
 - (2) Describe any classification of hormone.

- (d) Write any one out of two : 5
- (1) Write a short note on hormones of pituitary gland
 - (2) Describe menstrual cycle.
- 4 (a) Give answer of following questions : 4
- (1) How many chain are present in immunoglobulin structure?
 - (2) Write the name of primary taste.
 - (3) Write a function of T cells, and B Cells.
 - (4) Define Antibody.
- (b) Write any one out of two : 2
- (1) Write a note on innate immunity.
 - (2) Draw only a labeled diagram of photo receptor.
- (c) Write any one out of two : 3
- (1) Make a note on Gustato receptor.
 - (2) Describe in brief the structure of Immunoglobulin.
- (d) Write any one out of two : 5
- (1) Explain in detailed structure of Phono receptor.
 - (2) Describe Adaptive immunity.
- 5 (a) Give answer of following questions : 4
- (1) Write a function of microtome.
 - (2) Define Dehydration.
 - (3) Write a use of D.P.X.
 - (4) Write a major part seen in histological structure of adrenal gland.
- (b) Write any one out of two : 2
- (1) Discuss any hematoxylin as a stains.
 - (2) Brief note on Dealcoholization process.

(c) Write any one out of two : **3**

(1) Explain double staining process.

(2) Describe block preparation process.

(d) Write any one out of two : **5**

(1) Describe Histological structure of ovary.

(2) Give account of different types of fixatives
(any five).
