



**DQ-003-1016022**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. VI) (CBCS) Examination**

**April - 2022**

**Zoology : Z - 602**

*(Cardio. Vas., Respi. Mus. Sys., Repro.,  
Immun. Sens. Org. & Histo.) (Old Course)*

**Faculty Code : 003**

**Subject Code : 1016022**

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

[Total Marks : 70

- Instructions :** (1) Illustrate your answer with neat and labelled diagram.  
(2) Figure on the right side indicates full marks of the questions.

- 1 (a) Give answer of following question : 4  
(1) SA node is also known as a \_\_\_\_\_.  
(2) Define pericardium.  
(3) Write a full name of E.C.G.  
(4) write a function of AV valve.
- (b) Write any **one** out of two : 2  
(1) Write a note on diastolic blood pressure.  
(2) Draw internal structure of heart.
- (c) Write any **one** out of two : 3  
(1) Give description of Conduction and regulation of heart beat.  
(2) Write a note on intrinsic pathway of blood clotting.
- (d) Write any **one** out of two : 5  
(1) Write a brief note on origin of heart.  
(2) Give description of extrinsic pathway of blood clotting.

- 2 (a) Give answer of following question : 4
- (1) Define respiratory pigment.
  - (2) Chlorocruorin contains \_\_\_\_\_ atoms as a non-protein part.
  - (3) Give the name of contractile proteins in muscle.
  - (4) \_\_\_\_\_ the responsible factor for O<sub>2</sub> transportation in blood.
- (b) Write any **one** out of two : 2
- (1) Write a short note on haemocynin.
  - (2) Write function of muscular tissue.
- (c) Write any **one** out of two : 3
- (1) Describe transport of O<sub>2</sub>.
  - (2) Write a note on heamoglobin.
- (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 question : 4
- (1) Adrenalin hormone also known as a \_\_\_\_\_.
  - (2) What is the full name of TSH ?
  - (3) What is hormone ?
  - (4) Write a name of hormone secreted by pancreases.
- (b) Write any **one** out of two : 2
- (1) Write a note on classification of hormone.
  - (2) Write a short note on secreted by parathyroid gland.
- (c) Write any **one** out of two : 3
- (1) Write a short note on secreted by ovary.
  - (2) Describe Oestrus cycle.
- (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 question : 4
- (1) Write name of cells which are involve in nonspecific response defense.
  - (2) Write the name of primary taste.
  - (3) Which type of cells involved in antibody mediated response ?
  - (4) Define Antigen.
- (b) Write any **one** out of two : 2
- (1) Write a note on first line defense.
  - (2) Function of Rods and cones.
- (c) Write any **one** out of two : 3
- (1) Make a note on second line defiance.
  - (2) Physiology of Hearing.
- (d) Write any **one** out of two : 5
- (1) Describe Gustatory receptor.
  - (2) Structure and function of different type of antibody.
- 5 (a) Give answer of following question : 4
- (1) Write a use of rotary microtome.
  - (2) Give the function of sertoli cell.
  - (3) Write a full name of D.P.X.
  - (4) Give the zone of adrenal cortex.
- (b) Write any **one** out of two : 2
- (1) Describe kinds of stain.
  - (2) Describe simple fixative - any 2.
- (c) Write any **one** out of two : 3
- (1) Make a note on compound fixative.
  - (2) Describe double staining process.
- (d) Write any **one** out of two : 5
- (1) Describe Histological structure of ovary.
  - (2) Give a Sectioning, Dehydration, Dealcoholization and mounting process.