



**RY-003-1016022**

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

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

**March - 2019**

**Zoology : Paper - 602**

*(Cardiovascular System, Respiration & Muscular Sus.  
Endocrine, Repro., Imm., Sense Org. & Histo.)*

*(New Course)*

**Faculty Code : 003**

**Subject Code : 1016022**

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

[Total Marks : 70

- Instructions :** (1) Illustrate your answers with neat and labelled diagrams.  
(2) Figures to the right side indicate full marks of questions.

- 1 (A) Give the answer of following questions : 4  
(1) Define Cardiac cycle.  
(2) Which device is used to measure blood pressure?  
(3) Give the function of SA node.  
(4) From which right atrium receives blood?
- (B) Write any **one** out of two : 2  
(1) Explain Heart sounds.  
(2) Write a short note on ECG.
- (C) Write any **one** out of two : 3  
(1) Describe regulation of heart rate.  
(2) Explain circulation of blood.

- (D) Write any **one** out of two : 5
- (1) Explain physiology of blood clotting.
  - (2) Describe structure of heart.
- 2** (A) Give the answer of following questions : 4
- (1) Define Respiration.
  - (2) By which three form of CO<sub>2</sub> transported in the blood?
  - (3) Give the function of muscles.
  - (4) Write the name of muscle structural proteins.
- (B) Write any **one** out of two : 2
- (1) Explain T tubule.
  - (2) Describe Chloride shift.
- (C) Write any **one** out of two : 3
- (1) Write a short note on respiratory pigments.
  - (2) Describe structure of sarcomere.
- (D) Write any **one** out of two : 5
- (1) Explain Exchange of gases.
  - (2) Explain Muscle contraction.
- 3** (A) Give the answer of following questions : 4
- (1) Define Hormone.
  - (2) Write the function of parathyroid hormone.
  - (3) Give the name of hormones produced by thymus..
  - (4) Define Oestrous cycle.

- (B) Write any **one** out of two : **2**
- (1) Write a short note on chemical classes of hormone.
  - (2) Describe Pineal gland.
- (C) Write any **one** out of two : **3**
- (1) Explain Hormones of pancreas.
  - (2) Describe Thyroid gland.
- (D) Write any **one** out of two : **5**
- (1) Explain in detail pituitary gland.
  - (2) Explain Menstrual cycle.
- 4 (A) Give the answer of following questions : **4**
- (1) Define Antigen.
  - (2) Write the name of different types of antimicrobial substances.
  - (3) What is adaptive immunity?
  - (4) Define Phagocytes.
- (B) Write any **one** out of two : **2**
- (1) Write a short note on Natural killer cells.
  - (2) Explain Gustatory pathway.
- (C) Write any **one** out of two : **3**
- (1) Explain Physiology of Vision.
  - (2) Describe Inflammation.
- (D) Write any **one** out of two : **5**
- (1) Give a detail account on structure, function and classes of antibody.
  - (2) Describe Phonoreceptor.

- 5 (A) Give the answer of following questions : 4
- (1) What is histology?
  - (2) Define Microtomy.
  - (3) Give the name of nuclear stain.
  - (4) Write the function of leydig cells.
- (B) Write any **one** out of two : 2
- (1) Describe Fixatives.
  - (2) Write a note on histological structure of testis.
- (C) Write any **one** out of two : 3
- (1) Describe histology of adrenal gland.
  - (2) Explain single and double staining methods.
- (D) Write any **one** out of two : 5
- (1) Describe histology of ovary.
  - (2) Explain detail process of histology.
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