

B.Sc. Semester - 6 (CBCS) Examination**March/April-2025 (NEW COURSE)****Animal Physiology, Immunology, Sense Organs (Core (New))****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1 (A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Describe Conduction System of Heart.
 2. Describe Physiology of Blood Coagulation.
- Que.1 (B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. Write a note on Double Circulation.
 2. Write a note on Coronary Artery Disease.
- Que.1 (C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)
1. Give the location of Bicuspid valve in structure of heart.
 2. What is Artherosclerosis?
 3. _____ anti-co-agulant found in blood.
 4. Define systolic and diastolic blood pressure.
 5. Define E.C.G.
- Que.2 (A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Describe Exchange of gases.
 2. Describe Transport of gases.
- Que.2 (B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. Describe Pulmonary ventilation.
 2. Write a note on any three respiratory pigments.
- Que.2 (C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)
1. Which muscles are involved in the process of exhalation?
 2. What is the typical partial pressure of oxygen (PO_2) in alveoli of the lungs?
 3. What percentage of CO_2 is transported in the blood as bicarbonate ions?
 4. Which respiratory pigment is found in Arthropods?
 5. is the primary control center for respiration.
- Que.3 (A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Describe structure, function, and hormones of Adrenal gland.
 2. Describe physiology of muscle contraction.
- Que.3 (B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. Write a note on conduction of nerve impulse.
 2. Write a note on structure, function and hormones of Ovary.

Que.3 (C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)

1. Which type of neuron has a single axon and a single dendrite?
2. Which type of muscle is found in the walls of internal organs?
3. Give the primary function of Cardiac muscle.
4. Which hormones are secreted by Thyroid gland?
5. Testosterone secreted from which organ?

Que.4 (A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)

1. Describe structure and classes of Immunoglobulin.
2. Give a general account of Innate Immunity.

Que.4 (B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)

1. Write a note on Olfactory receptor.
2. Write a note on Gustato receptor.

Que.4 (C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)

1. What is the function of IgM?
2. Define Adaptive Immunity.
3. Write function of rod and cone cell in photoreceptor.
4. List out the bones found in phonoreceptor.
5. Give the function of touch corpuscles.

Que.5 (A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)

1. Describe Double staining technique in detail.
2. Describe histological structure of skin.

Que.5 (B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)

1. Describe histological structure of tongue.
2. Describe any four type of stains.

Que.5 (C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)

1. Give full form of DPX.
2. _____ stain is used for chromosome staining.
3. What is dehydration?
4. Give function of spleen.
5. What is the function of Olfactory epithelium?
