

B.Sc. Semester - 6 (CBCS) Examination**March/April-2024 (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) Answer the following question. (any one out of two) (07)
1. Describe cardiac cycle and cardiac output.
 2. Describe physiology of blood coagulation.
- Que.1(B) Answer the following question. (any one out of two) (04)
1. Write a short note on E.C.G.
 2. Write a short note on origin of heart.
- Que.1(C) Answer the following question. (any three out of five) (03)
1. Give the location of tricuspid valve.
 2. Write the function of SA node and AV node.
 3. What is congenital defect?
 4. What are diastolic and systolic blood pressure?
 5. Give the names of layers of heart wall.
- Que.2(A) Answer the following question. (any one out of two) (07)
1. Give detail account of respiratory pigments.
 2. Describe transport of carbon dioxide.
- Que.2(B) Answer the following question. (any one out of two) (04)
1. Write a short note on Exchange of gases.
 2. Write a short note on Pulmonary ventilation.
- Que.2(C) Answer the following question. (any three out of five) (03)
1. Normal values for alveolar gas pressures are $PO_2 = \text{_____ mmHg}$ and $PCO_2 \text{ _____ mmHg}$.
 2. What is Chloride shift?
 3. What is respiratory centre?
 4. Write Dalton's law.
 5. What is CO poisoning?
- Que.3(A) Answer the following question. (any one out of two) (07)
1. Describe in detail structure, function and disorder of pituitary gland.
 2. Explain conduction of nerve impulse in detail.
- Que.3(B) Answer the following question. (any one out of two) (04)
1. Write a note on physiology of muscle contraction.
 2. Write a note on hormone and disorder of thyroid gland.
- Que.3(C) Answer the following question. (any three out of five) (03)
1. Which hormone play crucial role in circadian rhythm.
 2. Which hormones are secreted from Testes?
 3. List out the hormones of Adrenal gland.
 4. Write only names of structural neurons.
 5. Write location of smooth muscle.
- Que.4(A) Answer the following question. (any one out of two) (07)
1. Describe in detail: Innate immunity.
 2. Give detail account of photo receptors.

- Que.4(B) Answer the following question. (any one out of two) (04)
1. Write a short note on types and functions of antibodies.
 2. Write a short note on Gustato receptors.
- Que.4(C) Answer the following question. (any three out of five) (03)
1. Which region of the retina is responsible for ability to see fine details?
 2. Give names of bones present in ear.
 3. What is the lymphatic system composed of?
 4. Write function of Eustachian tube.
 5. What are the main cells involved in cell-mediated immunity?
- Que.5(A) Answer the following question. (any one out of two) (07)
1. Describe the process of making permanent histological slide.
 2. Describe histological structure and function of thymus and spleen.
- Que.5(B) Answer the following question. (any one out of two) (04)
1. Write a short note on fixatives and their properties.
 2. What is microtomy? Describe any two types of Microtome and its applications.
- Que.5(C) Answer the following question. (any three out of five) (03)
1. What is the use of DPX in histology?
 2. Give composition of bouins fluid.
 3. What is the use of Acetocarmine in histology?
 4. What is the function of haematoxylin and eosin?
 5. What is the function of olfactory epithelium?
