

B.Sc. Semester - 6 (CBCS) Examination**March/April-2023 (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.

-
- Q.1(A) Answer the following question. (Any One) (07)**
1. What is blood coagulation? Describe the pathways of blood coagulation.
 2. Give detail account of Heart Conduction System.
- Q.1(B) Answer the following questions. (Any One) (04)**
1. Describe in brief: Artherosclerosis
 2. Write a short note on cardiac cycle.
- Q.1(C) Answer the following questions. (Any Three) (03)**
1. What is Bradycardia?
 2. What is stroke volume?
 3. Ventricular diastole occurs for seconds.
 4. Give the location of SA node.
 5. In ECG, P wave is stands for.....
- Q.2(A) Answer the following question. (Any One) (07)**
1. Describe in detail: Exchange of gases.
 2. Describe in detail: Pulmonary ventilation.
- Q.2(B) Answer the following questions. (Any One) (04)**
1. Write a short note on Oxygen Hemoglobin Dissociation Curve.
 2. Give brief view of Respiratory pigments: Hemoglobin and Hemocyanin.
- Q.2(C) Answer the following questions. (Any Three) (03)**
1. What is Chloride Shift?
 2. Echinochrome is found in.....
 3. Give the Henry's Law.
 4. What is Haldane effect?
 5. Give any two abnormalities in Oxygen transport mechanism.
- Q.3(A) Answer the following question. (Any One) (07)**
1. Describe physiology of muscle contractions.
 2. Give detail account of Pituitary gland.
- Q.3(B) Answer the following questions. (Any One) (04)**
1. Give brief view on types of neurons.
 2. Describe hormones of Thyroid and Parathyroid gland.

- Q.3(C) Answer the following questions. (Any Three) (03)**
1. Describe bipolar neuron.
 2. Which protein is found in thin filament?
 3. Give the difference between skeletal muscles and smooth muscles.
 4. Give the function of hormones of Adrenal gland.
 5. Give the functions of Progesterone hormone.
- Q.4(A) Answer the following question. (Any One) (07)**
1. Describe: Innate Immunity
 2. Give a detail account of Gustato and Photo receptors.
- Q.4(B) Answer the following questions. (Any One) (04)**
1. Give brief view on – Thymus gland
 2. Write a short note on structure of Immunoglobulin.
- Q.4(C) Answer the following questions. (Any Three) (03)**
1. Define: Epitopes
 2. Which antibody known as Secretory antibodies?
 3. Make a list of first line defense of immune system.
 4. Which cells have MHC II proteins.
 5. Write the functions of rod cell in photoreceptor.
- Q.5(A) Answer the following question. (Any One) (07)**
1. Describe the Double staining technique in detail.
 2. Give general account on technique for making histological slides.
- Q.5(B) Answer the following questions. (Any One) (04)**
1. Write a short note on histological structure of Bone & cartilage tissue.
 2. Write a short note on any two types of Microtome and their applications.
- Q.5(C) Answer the following questions. (Any Three) (03)**
1. Why DPX is used for mounting?
 2. Write the functions of Lymph nodes.
 3. Give the uses of Hematoxylin.
 4. Make a list of different types of fixatives.
 5. What is dyhydration?
