

B.Sc. Semester - 6 (CBCS) Examination**March/April-2024 (OLD COURSE)****CARDIO SYS, RESP AND MUS SYS AND REPROD. IMMUNO. AND HISTO(CORE)****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 structure of heart with labelled diagram.
 2. Give a general account on blood pressure and pulse rate.
- Que.1(B) Answer the following question. (any one out of two) (04)
1. Write a short note on E.C.G.
 2. Give names of blood coagulation factors and write its role.
- Que.1(C) Answer the following question. (any three out of five) (03)
1. Give the location of Bicuspid valve.
 2. What is Atherosclerosis?
 3. Give the location of AV (atrioventricular) node.
 4. What are diastolic and systolic blood pressure?
 5. What are extrinsic and intrinsic pathway of blood coagulation?
- Que.2(A) Answer the following question. (any one out of two) (07)
1. Describe structure and function of skeletal muscle with labelled diagram.
 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 Respiratory pigments.
- 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. Which enzyme is responsible for the formation of Carbonic acid in RBC?
 4. What is hypoxia?
 5. Which respiratory pigment is found in mollusca and arthropoda?
- Que.3(A) Answer the following question. (any one out of two) (07)
1. Describe in detail: Menstrual cycle.
 2. Describe functions and disorders of Pituitary gland hormones.
- Que.3(B) Answer the following question. (any one out of two) (04)
1. Write a short note on Oestrus cycle.
 2. Describe regulation of hormone secretion.
- Que.3(C) Answer the following question. (any three out of five) (03)
1. Which hormones are secreted from Ovary?
 2. Which hormones are secreted from Testes?
 3. List out the hormones of Adrenal gland.
 4. Give names of disorders related to Thyroid gland hormones.
 5. List out endocrine glands.
- Que.4(A) Answer the following question. (any one out of two) (07)
1. Describe in detail: Innate immunity.
 2. Give detail account of Gustatoreceptor.

- 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 Photoreceptor.
- Que.4(C) Answer the following question. (any three out of five) (03)
1. What is hyper sensitivity?
 2. Give names of bones present in ear?
 3. Define: Antigen.
 4. Write function of Eustachian tube.
 5. What is adaptive 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 Adrenal gland.
- Que.5(B) Answer the following question. (any one out of two) (04)
1. Write a short note on fixatives and their properties.
 2. Draw labelled diagram of histological structure of testis.
- Que.5(C) Answer the following question. (any three out of five) (03)
1. What is the use of Haematoxylin?
 2. Give composition of bouins fluid.
 3. Which stain is used to stain cytoplasm in histology?
 4. Give the name of mounting agent used in histology.
 5. What is the use of Acetocarmine?
