

**B.Sc. Semester - 6 (CBCS) Examination****April/May-2022 (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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- Q.1(A) Attempt any one of the following (07)
1. Give a detailed account of structure of heart.
  2. Give an account of Blood pressure and pulse rate.
- Q.1(B) Attempt any one of the following (04)
1. Write a short note on Cardiac output.
  2. Describe: platelet plug formation.
- Q.1(C) Attempt any three of the following (03)
1. .... valve is present between Right atrium and Right ventricle.
  2. Which ion play important role in blood clotting?
  3. Give the function of Bundle of His.
  4. Define: stroke volume.
  5. .... wave of E.C.G. indicates Atrial depolarization.
- Q.2(A) Attempt any one of the following (07)
1. Give an account on carbon dioxide transport.
  2. Describe structure of skeletal muscle.
- Q.2(B) Attempt any one of the following (04)
1. Write a short note on Oxygen transport.
  2. Write a short note Pulmonary ventilation.
- Q.2(C) Attempt any three of the following (03)
1. ....% of total CO<sub>2</sub> is transported by Carbemino compound form.
  2. Which are the regulatory proteins present in muscle fibre?
  3. What is Bohr effect?
  4. List out types of muscles.
  5. Which respiratory pigment is found in sea urchine?
- Q.3(A) Attempt any one of the following (07)
1. Describe hormones of Gonads.
  2. Describe oestrus cycle in detail.
- Q.3(B) Attempt any one of the following (04)
1. Write a short note on menstrual cycle.
  2. Write a note on hormones of thyroid gland.

- Q.3(C) Attempt any three of the following (03)
1. Make a list of steroid hormones.
  2. Give the function of GH hormone.
  3. Which hormones are produced from Posterior pituitary gland?
  4. Give examples of polyoestrus animals.
  5. Which hormones are produced from adrenal medulla?
- Q.4(A) Attempt any one of the following (07)
1. Describe in detail: Structures and classes of immunoglobulin.
  2. Describe: Photo receptors.
- Q.4(B) Attempt any one of the following (04)
1. Write a short note on second line defence.
  2. Describe: Structure of gustato receptor.
- Q.4(C) Attempt any three of the following (03)
1. Which cells mature in Thymus?
  2. Make a list of first line defence of immune system.
  3. Make a list of internal ear ossicles.
  4. Which cells are first to reach at the site of infection.
  5. Give the names of photoreceptor cells.
- Q.5(A) Attempt any one of the following (07)
1. Describe technique for single and double staining.
  2. Give histological structure of adrenal gland.
- Q.5(B) Attempt any one of the following (04)
1. Write a short note on histological structure and function of Ovary.
  2. Describe any two basic stains.
- Q.5 (C) Attempt any three of the following (03) (03)
1. Eosin is used for.....staining
  2. Which cells are found in between seminiferous tubules?
  3. ....is used for adhesion of the section to the slide.
  4. Which substance is used as clearing agent?
  5. Which instrument is used for cutting the tissue from wax block?

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