

B.Sc. Semester - 6 (CBCS) Examination
March/April -2020

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) Attempt any one of the following (07)

1. Describe detailed account of structure of heart.
2. Give an account of mechanism of blood clotting.

Que. 1 B) Attempt any one of the following (04)

1. Write a short on E.C.G..
2. Write a short note on platelet plug formation.

Que. 1 C) Attempt any three of the following (03)

1. Write names of layers constituting heart wall.
2. Name any two vaso constrictors.
3. Give the function of Bundle of His.
4. Give the location of baroreceptors in the circulatory system.
5. List out factors affecting heart rate.

Que. 2 A) Attempt any one of the following (07)

1. Give an account on carbon dioxide transport.
2. Describe structure of skeletal muscle with its microscopic anatomy.

Que. 2 B) Attempt any one of the following (04)

1. Write a short note on exchange of gases.
2. Write a short note on factors influencing oxygen transport.

Que. 2 C) Attempt any three of the following (03)

1. Which enzyme is responsible for the formation of Carbonic acid in RBC?
2. Which are the regulatory proteins present in muscle fibre?
3. What is Hamburger effect?
4. Write the function of T-tubules.
5. Which respiratory pigment is found in sea-urchin?

Que. 3 A) Attempt any one of the following (07)

1. Describe in detail primate female sexual cycle.
2. Function and disorder of pituitary glands hormones.

Que. 3 B) Attempt any one of the following (04)

1. Write a short note on oestrus cycle.
2. Write a note on hormones of gonads.

Que. 3 C) Attempt any three of the following (03)

1. Which disorders are resultant of hypothyroidism.
2. In which phase of oestrus cycle copulation occurs?
3. Give an example of positive feedback regulation of hormone.

4. Which hormones are produced from GI track?
5. Which hormone play crucial role in ovulation during menstrual cycle?

Que. 4 A) Attempt any one of the following (07)

1. Describe in detail innate immunity.
2. Describe Photo receptors.

Que. 4 B) Attempt any one of the following (04)

1. Describe types of antibodies and their functions.
2. Photo receptor.

Que. 4 C) Attempt any three of the following (03)

1. Which cells have MHC II protein?
2. Make a list of first line defence of immune system.
3. Eustachian tube is present between _____ and _____.
4. What is Hyper Sensitivity and which antibody is associated with it?
5. Which region of the retina is responsible for ability to see fine details?

Que. 5 A) Attempt any one of the following (07)

1. Describe technique for making permanent histological slide.
2. Give histological structure of ovary and testis.

Que. 5 B) Attempt any one of the following (04)

1. Write a short note on one acidic and one basic stain.
2. Describe properties of fixative and formalin as fixative.

Que. 5 C) Attempt any three of the following (03)

1. Which stain is obtained from insect body?
2. Give composition of Bouins Fluid.
3. Write a use of Mayers' Albumin?
4. Which part of adrenal gland originates from ectoderm?
5. What is use of basic water in double staining method?
