



K20U 1562

Reg. No. :

Name :

V Semester B.Sc. Degree (CBCSS – Reg./Sup./Imp.)

Examination, November 2020

(2014 Admn. Onwards)

CORE COURSE IN ZOOLOGY

5B09 ZLG : Comparative Animal Physiology and Human Physiology

Time : 3 Hours

Max. Marks : 40

- I. Answer **any one**. (1×8=8)
- 1) Explain the mechanism of transport of respiratory gases.
 - 2) Describe the molecular structure of striated muscles and describe the mechanism of muscle contraction.
- II. Answer **any one**. (1×8=8)
- 3) Describe the structure of Human Nephron and explain the mechanism of urine formation.
 - 4) Explain the different respiratory pigments in animals.
- III. Answer **any two**. (2×4=8)
- 5) Describe the structure of a chemical synapse and explain the synaptic transmission.
 - 6) What is counter current mechanism ? Explain.
 - 7) Describe the structure of human heart with the help of a labeled diagram.
- IV. Answer **any six**. (6×2=12)
- 8) Describe the Oxygen-hemoglobin dissociation curve.
 - 9) Mention the gastro-intestinal hormones and their function.
 - 10) What is decompression sickness ?

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- 11) Describe the compatibility of blood transfusion.
- 12) Mention any two cardio-vascular problems in Man.
- 13) Describe the mechanism of glomerular ultrafiltration.
- 14) Describe the organization of myosin filaments.
- 15) Briefly explain the sodium-potassium pump and its role in the transmission of electrical impulses.

V. Answer the following.

(4x1=4)

- 16) The copper containing respiratory pigment is
- 17) The universal donor blood group is
- 18) Xerophthalmia is caused due to the deficiency of
- 19) _____ is considered as the pace maker of heart.