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B.Sc. RNLK-/Zoology/C6T/21

2021

Zoology

[Third Semester]

Paper - C6T (Animal Physiology)

Full Marks : 40

Time : 2 hours

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

1. Answer any five. 5×2=10
- A) What is Pseudostratified epithelium? 2
- B) What are the characteristics of good fixatives? 2
- C) What are the functions of lymph? 2
- D) Classify hormones on the basis of their receptor location. 2

*(Turn Over)*

( 2 )

- E) Give the characteristics features of amine hormone with example and exceptions one. 2
- F) What is electrical synapse? Where serotonin is secreted name the sites. 2
- G) What is the structural composition of a thin filament of a muscle fibre?
- H) Write note on Harversian system. 2

**2. Answer any four. 4×5=20**

- A) Write down the location, characteristics features and furnctions of transitional epitheliam. 5
- B) Write about the hormone, which is secreted from a dipose tissue along with fuctions. 5
- C) Briefly describe about microscopic anatomy of a skeletal muscle fibre. 5
- D) Describe the process of signal transduction through a chemical synapse. 5
- E) Classify fixatives on the basis of mode of action with example. 5

( 3 )

F) What are the differences between epithelial tissue and connective tissue. What is auxochrome? 4+1=5

**3. Answer any one. 10×1=10**

A) Diagrammatically show how action potential stimulates a muscle to contract. Discuss cross bridge formation in this phase. Why you get hyperpolarization stage in an action potential curve? (5+3+2)=10

B) What are the main structural differences between bones and cartilage? When adrenaline acts in your body, then mention its mechanism of action with explanation. (5+5)=10