5. Describe the mechanism of tubular reabsorption of various solutes in mammalian kidney. [14]

OR

6. Describe the counter current mechanism prevailing in the mammalian kidney for concentrating the urine. Briefly mention the role of ADH feedback for maintaining water and solute balance. [7+7=14]

7. Describe the ultra structure of skeletal muscle fiber. Write in detail on the mechanism of muscle contraction. [7+7=14]

OR

8. Write notes on the following: [2x7=14]
   (a) Action potential
   (b) Neurotransmitters

9. Write an account on the role of free radicals and antioxidant defense system. [14]

OR

10. Write notes on the following: [2x7=14]
    (a) Dose-response relationships
    (b) Mechanism of action of toxic agents

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PG (CBCS) EVEN SEMESTER EXAMINATION, 2023

LIFE SCIENCE & BIOINFORMATICS

4th Semester

Course No. : LSCC - 402(Z)

(Animal Physiology)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

(Answer all questions)

1. What is hemopoiesis? Briefly elaborate on the process of hemopoiesis. Add a note on hemoglobin synthesis. [2+7+5=14]

OR

2. Describe the various stages involved in hemostasis. What is the role of fibrin in blood clotting? [9+5=14]

3. Write notes on the following: [2x7=14]
   (a) Gaseous exchange
   (b) Alveolar ventilation

OR

4. Describe the effects of neural and chemical mechanism that influence in regulation of respiration. [14]