

# School of Computing Science and Engineering

B.Tech CSE  
ETE - Jun 2023

Time : 3 Hours

Marks : 100

**Sem II - C2UD121B / BBS01T1008**

**Biology For Engineers**

*Your answer should be specific to the question asked*

*Draw neat labeled diagrams wherever necessary*

1. Define the following terms: (a) Inspiration (b) Expiration. K3 CO3 (5)
2. Explain the following terms: (a) Introns (b) Exons (c) Anticodon K2 CO2 (5)
3. Write about important characteristics of proteins. K1 CO1 (5)
4. Make use of a well-labelled diagram and explain the process of synaptic transmission from presynaptic membrane to postsynaptic membrane. K4 CO4 (10)

**OR**

- Analyze the significance of synaptic transmission in the transfer of information in human nervous system. K4 CO4 (10)
5. List the names of bio-macromolecules along with their salient features. K1 CO1 (10)
  6. Examine the structure of the brain and explain its relevance in nervous system. K2 CO2 (10)
  7. Develop a detailed diagram to show the human respiratory system, and explain its important features. K4 CO3 (10)
  8. Evaluate the structural framework and usage of X-Ray computed tomography.. K4 CO6 (15)

**OR**

- Elaborate upon the technique of sonography/ultrasound, focussing on its components and applicability. K4 CO6 (15)
9. Evaluate the role of the following techniques: (a) ECG (b) EMG (c) EEG (d) oximeter. K3 CO5 (15)
  10. Analyse the main features of inhibitory & excitatory post synaptic potential. K3 CO4 (15)