

M.Sc. (Zoology) (CBCS Pattern) Semester-I  
**PSCZOOT02 - Paper-II - General Physiology**

P. Pages : 1

Time : Three Hours



**GUG/W/24/11176**

Max. Marks : 80

- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Draw well labelled diagram wherever necessary.

1. Give a detailed account of structure of hemoglobin and mechanism of O<sub>2</sub> transport. **16**  
**OR**
  - a) Explain mechanism of enzyme action.
  - b) Describe chemical nature of synaptic transmission.
2. Give a detailed account of Molecular Mechanism of signal transduction. **16**  
**OR**
  - a) Describe thermos regulation in homeotherm.
  - b) Explain physiology of light production in fireflies.
3. Give a detailed account of Cholesterol metabolism. **16**  
**OR**
  - a) Explain digestion & absorption of carbohydrates.
  - b) Describe neurogenic heart.
4. Describe mechanism of Physiological adaptation. **16**  
**OR**
  - a) Describe in detail mineral metabolism in bone.
  - b) Explain chemistry of cerebrospinal fluid.
5. Write short on. **16**
  - a) Chromatophores
  - b) Steroid hormonal action
  - c) Oxidative phosphorylation
  - d) Avoidance & Tolerance

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