

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

P. Pages : 1

Time : Three Hours



GUG/W/18/11176

Max. Marks : 80

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

1. Describe in detail types, distribution and properties of respiratory pigments. 16

OR

Write notes on :

- a) Mechanism of enzyme action. 8
- b) Chromatophore & Melanophore. 8

2. Describe in detail the light producing organs in invertebrates and vertebrates. 16

OR

Write notes on :

- a) Osmoregulation in Pisces. 8
- b) Membrane receptors and signal transduction 8

3. Describe in detail the digestion of carbohydrates & proteins in gastro intestinal tract. 16

OR

Write notes on :

- a) TCA Cycle 8
- b) Arginine - Ornithine cycle. 8

4. Write an account on physiology of environmental stress and strain with respect to tolerance, avoidance resistance and physiological adaptations. 16

OR

Write notes on :

- a) Egg shell formation. 8
- b) Mechanism of reflex action. 8

5. Attempt the following : 16

- a) Neurotransmitters in Vertebrates.
- b) Thermoregulation in Poikilotherms.
- c) Heart valves.
- d) Chemistry of cerebrospinal fluid.
