

Post Graduate Teaching Department of Zoology
An Autonomous Department of
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
Programme: M. Sc. Zoology Semester -I (CBCS)
Theory Examination Winter-2022
Code and Name of Paper: PGZO1T2 Paper-1T2-General Physiology

Time: 3hrs

Maximum Marks: 60

Note

- 1. All the questions are compulsory.**
- 2. All questions carry equal marks.**
- 3. Draw well labelled diagrams and charts wherever necessary.**

Q.1 Describe in detail definition, classification, mechanism and factors affecting the enzyme action. **12**

OR

Write notes on-

- (a) Mechanism of synaptic transmission.
- (b) Electrocardiogram.

Q.2 Give a detail account on colour change mechanism. Add a note on its significance. **12**

OR

Write notes on-

- (a) Thermoregulation in Homeotherms.
- (b) Osmoregulation in aquatic organism.

Q.3 Describe in detail steps involved in glycolysis and add a note on its significance. **12**

OR

Write notes on-

- (a) TCA cycle.
- (b) β -oxidation pathway.

Q.4 Describe in details mechanism of formation, composition and flow of CSF. Add a note on its significance. **12**

OR

Write notes on-

- (a) Mechanism of water and electrolyte balance.
- (b) Physiology of environmental stress and strain.

Q. 5 Write in brief on the followings: - **12**

- (a). Haemoglobin.
- (b). Luciferin.
- (c). Simple protein.
- (d). Reflex action.