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**SUBJECT CODE NO:- F-6219**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**M.Sc. (Sem-III)( Zoology)**  
**Examinations December/January-2022-23**  
**Animal Physiology - I -522 Elective**

[Time: 3:00 Hours]

[Max.Marks:80]

“Please check whether you have got the right question paper.”

- N.B.
- i) Draw diagram wherever necessary.
  - ii) Part – A is compulsory carry 20 marks.
  - iii) Part – B Attempt five question 12 marks each.

**Part – A**

Q.1 Attempt the following multiple choice question.

**20**

1. The nephridia of earthworm without nephrostomes are
  - a) Integumentary
  - b) Pharyngeal
  - c) Sepial
  - d) Both a & b
2. Bipinnaria larva is found in the development
  - a) Sea-lily
  - b) Star fish
  - c) Sea Cu Cumber
  - d) Sea Star
3. Madreporite is associated with
  - a) Haemal System
  - b) Digestive System
  - c) Ambulacral System
  - d) Reproductive System
4. Respiratory organs in freshwater mussel
  - a) Book lungs
  - b) Pulmonary sacs
  - c) Gills
  - d) Respiratory siphons
5. The mode of feeding in leech is
  - a) Herbivorous
  - b) Carnivorous
  - c) Omnivorous
  - d) Sanguivorous
6. Chromophil Cells in earthworm are concerned with the secretion of
  - a) Amylase
  - b) Protease
  - c) Lipase
  - d) Coccon

7. The role of typhlosole in the intestine of earthworm is \_\_\_\_\_.
  - a) To increase absorptive surface
  - b) To control flow of blood
  - c) To produce digestive enzymes
  - d) To kill bacteria
8. The mode of respiration in earthworm is
  - a) Cutaneous
  - b) Gills
  - c) Pulmonary
  - d) Sub Cutaneous
9. Anti Coagulant secreted by leech is \_\_\_\_\_.
  - a) Heparin
  - b) Hirudin
  - c) Haematin
  - d) Hemoglobin
10. Cephalisation is a characteristic of \_\_\_\_\_.
  - a) Echinoderms
  - b) Annelida
  - c) Mollusca
  - d) Artropoda

### Part – B

Attempt any five question.

- |     |   |    |
|-----|---|----|
| Q.2 | Explain structure and function of heart in Crustacea        | 12 |
| Q.3 | What are respiratory organs in insects.                     | 12 |
| Q.4 | Give in detail the mechanism of reception in insects.       | 12 |
| Q.5 | Explain types of reproduction in Annelida with development. | 12 |
| Q.6 | What is Coelomic fluids and Coelomocytes in Echinodermata.  | 12 |
| Q.7 | Explain osmotic and ionic regulation in Mollusca.           | 12 |
| Q.8 | Which factors influencing in reproduction in Echinodermata. | 12 |