

M.Sc. (Part - I) (Zoology) (NEP Pattern) Semester-I  
**NEP-81 / 01MSCZO01-Core DSC Paper-I**  
**Structure and Function of Invertebrates**

P. Pages : 1

Time : Three Hours



**GUG/W/23/15143**

Max. Marks : 80

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- Notes : 1. All questions are compulsory.  
2. All questions carry equal marks.  
3. Illustrate your answers with suitable diagrams.

1. Write a note on polymorphism and metagenesis in coelenterates. **16**

**OR**

- a) Skeletal organization in sponges.  
b) Moderns scheme of animal classification.

2. Describe mechanism of excretion in Polychaeta. **16**

**OR**

- a) Formation of coelom.  
b) Structure and mechanism of reproduction in Dugesia.

3. Describe structure and affinities of Neopilina. **16**

**OR**

- a) Gill respiration in Crustacea.  
b) Describe neuroanatomical structure in Cephalopoda.

4. Describe structure and function of water vascular system in Asterias. **16**

**OR**

- a) Write affinities of Ctenophora.  
b) Give general account of Ectoprocta.

5. Attempt the following. **16**

- a) Ultrastructure of Flagella.  
b) Syncytial theory of origin of Metazoa.  
c) Peripatus.  
d) Bipinnaria larva.

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