



A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
(AUTONOMOUS) (Grant-in-Aid)
Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120



Master of Science (Semester- I) External Examination – 2025

SUBJECT CODE: PS01MAZOO01

(Systematics, Structural and Functional Anatomy of Invertebrates)

Date: 11-11-2025, (TUESDAY)

Time: 11:00 AM to 01:30 PM (2.5 hrs)

Total marks: 50

Q-1 Write the most appropriate answer from the following multiple-choice questions. [10]

1. Coelom originated first in which phylum.
(a) Annelida (b) Protozoa
(c) Cnidaria (d) Mollusca
2. In protostomia the blastopore develops into which structure during embryonic development?
(a) Mouth (b) Heart
(c) Anus (d) None
3. Which group is classified as deuterostome.
(a) Hemichordata (b) Echinodermata
(c) Chordata (d) all of these
4. In Mollusca, filter feeding is carried out mainly by:
(a) Gills (b) Radula
(c) Mantle cavity (d) Tentacles
5. In freshwater annelids, the excretory product is mainly _____.
(a) ammonia (b) urea
(c) uric acid (d) all of these
6. Green gland are found in:
(a) Crustaceans (b) Insects
(c) Arachnids (d) Molluscs
7. Cnidarians possess which type of nervous system?
(a) Nerve net (b) Ladder like
(c) Dorsal nerve cord (d) Central nervous system



8. The reproductive system of molluscs may be:
 (a) Dioecious (b) Hermaphroditic
 (c) a & b both (d) Asexual
9. The metamorphosis of larva into adult is controlled by:
 (a) Hormone (b) Digestive enzymes
 (c) Light (d) Osmotic pressure
10. Nemertinea are commonly known as:
 (a) Ribbon worms (b) Round worm
 (c) Flat worm (d) None
- Q-2 A. Differentiate between protostomia and deuterostomia with examples. [06]
 B. What is ICZN? Mention its main purpose in taxonomy. [04]

OR

- Q-2 A. Discuss the origin and functions of coelom in animals. [06]
 B. Mention important criteria used for animal classification [04]

- Q-3 What is filter feeding? Describe the patterns of feeding & mechanism of Echinodermata. [10]

OR

- Q-3 A. Explain the mode of nutrition in Hydra. [04]
 B. Describe the structure and function of respiratory organs in Arthropoda. [06]

- Q-4 Describe in detail the structure and functions of excretory organs in Annelida & Arthropoda phylums. [10]

OR

- Q-4 A. What are the different types of asexual reproduction in invertebrates? [05]
 B. Describe the organization of the nervous system in Annelida. [05]

- Q-5 Describe the structural organization and general characteristics of the minor invertebrate phyla: Wheel Animalcules. [10]

OR

- Q-5 Give organization & general characters of Branchiopoda. [10]