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SUBJECT CODE NO: - FNP-6257
FACULTY OF SCIENCE AND TECHNOLOGY
MSC. F.Y. (SEM-II) (NEP Pattern-2023-2024) Zoology
Examination November / December 2025
Helminthology-II - SAC165542T

[Time: 1:30 Hours]

[Max. Marks: 45]

Please check whether you have got the right question paper.

N. B

- 1) All questions are compulsory.
- 2) Draw diagram whenever necessary.
- 3) Use Only blue or black pen for writing.

**Q.1 Attempt the given multiple choice questions****10**

- 1) Which of the following statements best describe the nervous system of nematode?
 - a) It consists of ventral nerve cord only.
 - b) It has a simple nerve net similar to cnidarians.
 - c) It includes a dorsal and ventral nerve cord connected by nerve ring.
 - d) It lacks a nervous system entirely.
- 2) What is the primary role of amphids in nematode?
 - a) Excretion of metabolic waste
 - b) Sensory perception, particularly chemical detection
 - c) Mechanoreception for movement coordination
 - d) Nutrient absorption in the digestive tract.
- 3) How do nematodes maintain their hydrostatic skeleton?
 - a) By contracting their circular muscles.
 - b) Through a high-pressure pseudocoelomic fluid.
 - c) By secreting a rigid chitinous exoskeleton.
 - d) Using specialized cartilage like structure.
- 4) What is the primary neurotransmitter involved in nematode locomotion?

a. Dopamine	b. Acetylcholine
c. Serotonin	d. Gamma-aminobutyric acid.
- 5) What is a major evolutionary advantage of the nematode cuticle?
 - a) It allows gas exchange & photosynthesis
 - b) It provides rigid structure for muscle attachment.
 - c) It acts as a protective barrier against host immune responses and environmental stressor.
 - d) It enables nematodes to store excess nutrients.

Q.2 Write a note on following (any three)

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- 1) Ultrastructure of cuticle of nematodes
- 2) Reproductive system in male nematode
- 3) Life cycle pattern in *Trichuris trichura*
- 4) Write about essential food of nematodes
- 5) Excretory systems in nematodes.



Q.3 Write any two of following.

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- 1) Different life cycle pattern in nematode (*Trichinella spiralis*)
- 2) Nematode injuries to plant nematode (Above & Below ground)
- 3) Structure of stoma, its variation of oesophagus and its associated glands.