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Reg. No. :

Code No. : 10598 E Sub. Code : CSZO 42

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2024

Fourth Semester

Zoology

Skill Based Core – VERMITECHNOLOGY

(For those who joined in July 2021–2022 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer

1. The food of earthworm is _____
(a) Parasite (b) Carnivorous
(c) Detritus (d) Grazious
2. The earthworm consume all forms of garbages comes under _____
(a) Anecic (b) Epigeic
(c) Endogeic (d) Polyhumic
3. Which one of the following is the South Indian Species?
(a) Eutyphoeus orientalis
(b) Perionya excavatus
(c) Endrilus eugeniae
(d) Eisenia hortensis
4. The best method for collection of earthworm is _____
(a) Manual method
(b) Electrical method
(c) Chemical method
(d) Vibration method
5. The moisture required for the growth of earthworm is _____
(a) 60–70% (b) 75–90%
(c) 40–50% (d) 80–100%
6. The size of cement pit for rearing earthworm to produce vermicompost is _____
(a) 3 × 3 × 2 ft. (b) 4 × 3 × 2 ft
(c) 3 × 2 × 3 ft (d) 4 × 5 × 2 ft

7. The vermiculture ecosystem used to treat effluent water is _____

- (a) Vermifilter (b) Vermiwash
(c) Vermibed (d) Wormcast

8. The technology used to dispose chemical contamination of the soil by earthworm is called _____

- (a) Vermifiltration
(b) Vermi remediation
(c) Bioaccumulation
(d) None of these

9. BERI was established in

- (a) 1980
(b) 1985
(c) 1990
(d) 1984

10. The following are the vermicomposting products

- (a) Earthworms
(b) Vermicast
(c) Both (a) and (b)
(d) None of these

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write down the systematic position of Earthworm.

Or

(b) Explain the female reproductive system of Earthworm with neat labelled diagram.

12. (a) Describe the native species of earthworm.

Or

(b) Explain the factors influencing the culture of Earthworms.

13. (a) Explain the procedure for the preparation of Vermibed.

Or

(b) Write down the Nutritive values of the Vermicompost.

14. (a) Explain how the earthworms are useful for the improvement and reclamation of Land.

Or

(b) Explain the technical procedure adapted in Vermiwash preparation.

15. (a) Give an account on marketing strategies of Vermicomposting.

Or

(b) Explain the interaction of earthworms with other organisms.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the morphology of the earthworm with neat labelled diagram.

Or

(b) Discuss the earthworm as farmer's friend.

17. (a) Describe the culture techniques of earthworm.

Or

(b) Explain the methods used in collection and preservation of earthworms.

18. (a) Give an account on the specific qualities of vermicompost.

Or

(b) Explain the different methods of vermicomposting.

19. (a) "Earthworm as a bioreactor" – Discuss.

Or

(b) Explain the role of earthworms in Solid waste management.

20. (a) Explain the role of NGOs in Vermiculture.

Or

(b) Write an essay on the influence of Chemical inputs in Earthworm activity.