



APRIL/MAY 2019

BSMB 43 — VERMITECH

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Comment on the properties of Alkaline soil.
2. Critically comment on the role of fungi in soil.
3. Write a note on the properties of organic matter.
4. Comment on soil phosphorus and its significance.
5. Write short account on soil micro and macro organisms.
6. Give four beneficial micro organisms associated with earthworms.
7. Define Compositing.
8. Write short account on endemic species of earthworms.
9. Comment on Verm compost extract.
10. What are the maturity indices of compost?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions

11. (a) Write a detailed account on role of soil bacteria on soil nutrient status.

Or

- (b) Give a detailed account on different Horizons and its importance of a soil profile.

12. (a) Discuss briefly about the role of soil pH and electrical conductivity.

Or

- (b) Write an account on the role and significance nitrogen and potassium contents on soil nutrient status.

13. (a) Give a detailed account on burrowing activity of earthworms.

Or

- (b) Discuss briefly about classification of earthworms based on their ecological strategies.

14. (a) Write an account on different species of earthworm species employed for commercial vermicomposting processes.

Or

- (b) Write a detailed account on anaerobic composting process.

15. (a) What is vermi wash? Add notes on their benefits in agriculture.

Or

- (b) Discuss briefly about setting up of small scale vermicomposting unit.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions

16. Discuss in detail about properties and significance of sandy soils and clay soils.

17. Write an essay on physical properties of soil.

18. Discuss elaborately about the role of earthworms on soil nutrient management.

19. Discuss in detail about conversion of organic wasters into vermicompost.

20. Define vermicompost. Discuss in detail about nutritional and quality parameters of vermicompost over inorganic fertilizers.