# KAMARAJ COLLEGE (Autonomous)

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(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

**(4 Pages)** **Reg. No:……**

**Question Code: 26E00605** **Course Code : 24USZO21**

**UG Degree - End Semester Examinations, April 2026**

**Second Semester**

**B.SC., ZOOLOGY**

**Bio Composting for Entrepreneurship**

**(For those who joined in July 2024 onwards)**

**Time : 3Hours** **Maximum : 75 Marks**

**PART – A (10 × 1 = 10 Marks)**

**Answer ALL Questions**

**Choose the correct answer :**

CO:1 K:1 1. Name the main organisms involved in biocomposting:

(a) Viruses (b) Bacteria and fungi

(c) Protozoa only (d) Algae

CO:1 K:1 2. Find the final product of biocomposting which is rich in:

(a) Heavy metals (b) Pathogens

(c) Plastic residues (d) Humus and nutrients

CO:2 K:1 3. Find the other name for Ground heap composting:

(a) Windrow method (b) Sludge method

(c) Incineration (d) Landfill dumping

CO:2 K:1 4. State the main advantage of tank composting:

(a) Open exposure (b) Lower nutrient content

(c) Increased odor (d) Better environmental control

CO:3 K:1 5. State the ideal location for preparing a biocompost pit:

(a) Waterlogged area (b) Rocky hilltop

(c) Shaded and well-drained area (d) Near chemical storage

CO:3 K:1 6. Why rock phosphate is added to compost?

(a) Increasing phosphorus content (b) Reducing nitrogen

(c) Increasing odor (d) Lowering temperature

CO:4 K:1 7. Which of the following is a plant growth–promoting effect of biocompost?

(a) Decrease in root development
(b) Suppression of beneficial microbes
(c) Production of growth hormones like auxins
(d) Increased soil compaction

CO:4 K:2 8. How the Application of biocompost helps in waste reduction?

(a) Burning organic waste
(b) Converting biodegradable waste into manure
(c) Landfilling organic residues
(d) Increasing plastic waste

CO:5 K:1 9. Choose the primary objective of establishing a small biocompost unit in a Self Help Group:

(a) Increase chemical fertilizer usage
(b) Increase waste accumulation
(c) Reduce organic farming practices
(d) Promote income and employment generation

CO:5 K:1 10. Find the major variable cost in compost production:

(a) Land cost
(b) Machinery depreciation
(c) Labour and raw materials
(d) Building construction

**PART – B (5 X 5 = 25 Marks)**

**Answer ALL Questions choosing either (a) or (b).**
**Answer should not exceed 250 words.**

CO:1 K:3 11. (a) Define biocomposting and explain its basic principle.

**(OR)**

(b) Explain the ecological importance of biocomposting.

CO:2 K:4 12. (a) Differentiate between batch and continuous composting methods.

**(OR)**

(b) Conclude the large-scale composting technology used in municipalities.

CO:3 K:2 13. (a) Outline the factors affecting compost bed efficiency.

**(OR)**

(b) Summarize the importance of maintaining proper C:N ratio

in composting.

CO:4 K:3 14. (a) Organise the value-added products derived from biocomposting.

**(OR)**

(b) Explain how biocompost promotes plant growth.

CO:5 K:1 15. (a) Outline the fixed and variable costs involved in setting up a small biocompost unit.

**(OR)**

(b) Summarize the importance of break-even analysis in a compost project proposal.

**PART – C (5 X 8 = 40 Marks)**

**Answer ALL Questions choosing either (a) or (b).**
**Answer should not exceed 500 words.**

CO:1 K:5 16. (a) Discuss the process of aerobic and anaerobic composting with suitable examples.

**(OR)**

(b) Elaborate the role of vermicomposting in sustainable waste management.

CO:2 K:5 17. (a) Explain the different types of biocomposting technologies with their merits and limitations.

**(OR)**

(b) Explain field pit, ground heap, and tank composting methods with suitable diagrams.

CO:3 K:5 18. (a) Discuss the procedure for preparation of biocompost pit and bed using suitable amendments.

**(OR)**

(b) Compile the factors influencing compost maturity and nutrient enrichment.

CO:4 K:5 19. (a) Evaluate the applications of biocompost in soil fertility maintenance and sustainable agriculture.

**(OR)**

(b) Discuss the ecological and economic benefits of biocomposting in waste management.

CO:5 K:5 20. (a) Discuss the socio-economic impact of establishing small biocompost units in rural areas.

**(OR)**

(b) Elaborate the role of SHGs in promoting sustainable entrepreneurship through biocompost production.