

# KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code: 26E00613

Course Code : 25USZ021

UG Degree - End Semester Examinations, April 2026

Second Semester

B.Sc., ZOOLOGY

Bio Composting for Entrepreneurship

(For those who joined in June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

## PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

- CO:1 1. Composting of organic matter involves\_\_\_\_\_
- K:1 (a) Anaerobic digestion (b) Aerobic digestion  
(c) Fermentation (d) Combustion
- CO:1 2. Aerobic composting occurs in the presence of:
- K:2 (a) Nitrogen (b) Carbon dioxide  
(c) Oxygen (d) Methane
- CO:2 3. Dug pits in the soil used for composting is called as\_\_\_\_\_
- K:2 (a) Tank composting (b) Field pit composting  
(c) Continuous composting (d) Heap composting
- CO:2 4. Which of the following is called as ground heap composting?
- K:1 (a) Windrow method (b) Anaerobic method  
(c) Tank method (d) Batch method
- CO:3 5. Reason for adding soil between compost layer is\_\_\_\_\_
- K:2 (a) Increase weight (b) Improve colour  
(c) Introduce decomposer microorganisms (d) Prevent insects
- CO:3 6. Which amendment is commonly used to speed up decomposition?
- K:1 (a) Sand (b) Lime  
(c) Urea (d) Rock phosphate

- CO:4 7. Biocompost mainly improves soil fertility by increasing:  
K:2 (a) Soil salinity (b) Organic matter content  
(c) Soil compaction (d) Heavy metals
- CO:4 8. Which of the following is NOT a benefit of using biocompost?  
K:1 (a) Improved soil structure (b) Enhanced soil fertility  
(c) Immediate release of nutrients (d) Increased microbial activity
- CO:5 9. Which government-supported group commonly undertakes  
K:1 small biocompost projects in rural India?  
(a) Private companies (b) Self Help Groups (SHGs)  
(c) Corporate firms (d) Export agencies
- CO:5 10. Select the fixed cost in a biocompost unit?  
K:2 (a) Construction of compost pit (b) Water charges  
(c) Raw materials (d) Labour wages

**PART - B (5 X 5 = 25 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 250 words.**

- CO:1 11. (a) Identify the importance of biocomposting on improvement  
K:3 of soil health and fertility.

**(OR)**

- (b) Organize the importance of biocomposting on bioremediation and waste reduction.

- CO:2 12. (a) Identify the differences between batch and continuous  
K:4 composting methods.

**(OR)**

- (b) Analyze the advantages and disadvantages of field pit method of biocomposting.

- CO:3 13. (a) Explain the steps involved in the preparation of biocompost  
K:5 bed.

**(OR)**

- (b) Describe the importance of biocompost bed preparation.

- CO:4 14. (a) Elaborate the applications of biocompost in soil fertility  
K:4 maintenance.

**(OR)**

- (b) Discuss the applications of biocompost in the promotion of

plant growth.

CO:5 15. (a) Describe the government schemes and subsidies for  
K:4 establishing small biocompost unit.

**(OR)**

(b) Analyze the cost structure of a small biocompost unit.

**PART - C (5 X 8 = 40 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 500 words.**

CO:1 16. (a) Construct the aerobic composting method.  
K:3

**(OR)**

(b) Develop the anaerobic composting method.

CO:2 17. (a) Analyze the steps involved in the large scale biocomposting.  
K:4

**(OR)**

(b) Examine the process of ground heap method of biocomposting.

CO:3 18. (a) Explain the steps involved in the preparation of biocompost  
K:5 pit.

**(OR)**

(b) Explain the amendments in the preparation of biocompost bed.

CO:4 19. (a) Elaborate the applications of biocompost in value-added  
K:4 products and waste reduction.

**(OR)**

(b) Discuss the sustainable soil fertility through Indian knowledge systems.

CO:5 20. (a) Analyze the roles of SHGs in small biocompost units.  
K:4

**(OR)**

(b) Develop an outline of the project proposal for establishing small biocompost unit.