

**SECTION – A****Answer ALL Questions :****(10 × 2 = 20)**

1. Molecular medicine.
2. Gene drug.
3. Artificial insemination.
4. Microinjection.
5. GM food.
6. Germplasm storage.
7. Define nanoparticles.
8. Properties of silver nanoparticles.
9. Bioremediation.
10. Biomining.

SECTION – B**Answer ALL Questions :****(5 × 5 = 25)**

11. a) Write the advances in drug targeting.

(OR)

- b) Explain the molecular diagnosis of genetic diseases.

12. a) Explain the process of electroporation.

(OR)

- b) Comment on engineered embryonic stem cells.

13. a) Give an account on bacterial pesticides.

(OR)

- b) Define biofertilizers. Add their types and application.

14. a) Comment on the strategies for nanoparticle synthesis.

(OR)

- b) Write the characteristics of nanoparticle.

15. a) Write a note on solid waste management.

(OR)

- b) Give a short account on oreleaching.

SECTION – C**Answer any THREE Questions :****(3 × 10 = 30)**

16. Give a detailed account on tissue engineering.
17. Discuss the in vitro fertilization.
18. Explain the application of tissue culture.
19. Discuss the role of nanotechnology in medicine and drug designing.
20. Give a detailed account on biogas production.

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**ENVIRONMENTAL BIOLOGY**

Under CBCS – Credit 5

Time: 3 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :****(10 × 2 = 20)**

1. Remote sensing.
2. *in situ* conservation.
3. Non-renewable resources.
4. North East monsoon.
5. Xenobiotics.
6. Half-life.
7. Space Ecology.
8. Satellite towns.
9. Forest fire.
10. MAB.

SECTION – B**Answer ALL Questions :****(5 × 5 = 25)**

11. a) Discuss Leibig's law with a suitable example.

(OR)

- b) Bring out various types of ecological succession.

12. a) Analyse different types of non-conventional energy resources.

(OR)

- b) Enumerate the causes of soil erosion.

13. a) Correlate environmental toxicants with public health hazard.

(OR)

- b) Bring out various sources of toxicants dumped into environment.

14. a) What is meant by population explosion? Mention its social impacts.

(OR)

- b) Discuss the impact of transport systems on urban environment.

15. a) Analyse various types of natural calamities.

(OR)

- b) Mention the role of pollution control board.

SECTION – C**Answer any THREE Questions :****(3 × 10 = 30)**

16. What is meant by biogeochemical cycle? Give an account on nitrogen cycle in nature.
17. Analyse any four methods of rain water harvesting.
18. Discuss the biological effects of nuclear radiation.
19. Analyse the different types of life supporting systems of space ecology.
20. Write an essay on goals, objectives and principles of environmental education.

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

(Autonomous & Residential)

[Affiliated to Madurai Kamaraj University]

M.Sc. Zoology Degree (Semester) Examinations, April 2016

Part – III : Elective Subject : Fourth Semester : Paper – I

BIO FARMING TECHNOLOGY

Under CBCS – Credit 5

Time: **3** Hours

Max. Marks: **75**

SECTION – A

Answer ALL Questions :

(10 × 2 = 20)

1. Grainages.
2. Non-Mulberry Silkworms.
3. Vermi wash.
4. Vermi cast.
5. Polyculture.
6. Ornamental fish culture.
7. Artificial insemination.
8. Native Dairy breeds.
9. Nutritive value of honey.
10. Broilers.

SECTION – B

Answer ALL Questions :

(5 × 5 = 25)

11. a) Discuss the appliances used for silkworm rearing.

(OR)

b) Describe the vegetative propagation method for mulberry cultivation.

12. a) How will you prepare vermi wash?

(OR)

b) Explain the Wedge system of vermi composting.

13. a) Give an account of induced spawning technique.

(OR)

b) Illustrate the biology of any one Indian major carp.

14. a) Listout the dairy products.

(OR)

b) Discuss the characteristics of exotic dairy breeds.

15. a) How honey is harvested?

(OR)

b) How will you construct a poultry house?

SECTION – C

Answer any THREE Questions :

(3 × 10 = 30)

16. Brief about grainage technology.

17. Comment on the role of Vermi technology in organic farming.

18. How will you control the ornamental fish disease causing pests?

19. Discuss in detail the feeding & breeding systems of Dairy breeds.

20. Summarise the beekeeping methods.

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