BLDE (DEEMED TO BE UNIVERSITY)

7/24

B.Sc. in Biotechnology

[Time: 3 Hours] **[Max. Marks: 80]**

V SEMESTER

PAPER - I (Food Biotechnology)

QP CODE: 8575

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions — 10X1 = 10 Marks

1. Explain different types of fermented foods, their preservation and uses.

Short Essays: (Any – 8) — 5 X 8 = 40 Marks

2. What is food spoilage? Explain briefly.
3. Write a note on fermented dairy products.
4. Explain food preservatives using chemicals.
5. Write a note on food additives and flavoring agents.
6. Importance of bacteria in food.
7. What are fermented foods? Types of fermented foods.
8. Write a note on food poisoning.
9. What are the benefits of fermented foods?
10. What are essential and non-essential amino acids?

Short Answers: (Any – 10) — 3 X 10 = 30 Marks

11. What is sterilization? Give an example.
12. What are different types of fermented foods?
13. Write a note on dairy products.
14. Write a short note on Pasteurization.
15. What is food biotechnology?
16. Write a note on fermented foods.
17. Write a short note on Aflatoxins and Ochratoxins.
18. What is food microbiology?
19. Write a short note on the importance of fungi in food.
20. What are mycotoxins and Botulinum?
21. Write a note on Single Cell Protein.

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B.Sc. in Biotechnology

[Time: 3 Hours] [Max. Marks: 80]

V SEMESTER

PAPER - II (Agriculture Biotechnology)

QP CODE: 8576

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions **10X1 = 10 Marks**

1. Write in detail about protoplast isolation & its culture.

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. General composition of plant tissue culture media
3. Discuss about embryo culture.
4. Steps involved in T-DNA transfer its application
5. Methods of protoplast isolation
6. Cryopreservation techniques
7. What are transgenic plants? Give its advantages
8. Types of culture media
9. Ti plasmid.
10. Growth regulators

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

11. Chemical method of gene transfer
12. What is explant?
13. Secondary metabolite
14. Suspension culture
15. Drought resistant plant
16. Chemical method of gene transfer
17. What is explant?
18. Secondary metabolite
19. Anther culture
20. Suspension culture
21. RAPD technique

BLDE (DEEMED TO BE UNIVERSITY) 5/07/2024

B.Sc. in Biotechnology

[Time: 3 Hours] [Max. Marks: 80]

V SEMESTER

PAPER - III (Medical Biotechnology)

QP CODE: 8577

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Production of Vaccines through rDNA Technology

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. HGH
3. DNA finger printing
4. Stem Cells
5. RIA
6. Radiotherapy
7. Huntington diseases
8. cystic fibrosis
9. Sonotheorphy
10. PCR

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Interferon's
12. Tissue plasminogen activator
13. Gene gun
14. Application of stem cell
15. Properties of cancer Cells
16. Parkinson Disease
17. FISH
18. Live attenuated Vaccines
19. Kleinfelter's syndrome
20. Down syndrome,
21. Oncogenes

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B.Sc. in Biotechnology

[Time: 3 Hours] [Max. Marks: 80]

V SEMESTER

PAPER - IV (Environment Biotechnology)

QP CODE: 8578

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions 10X1 = 10 Marks

1. Explain types of secondary treatment of sewage

Short Essays: (Any – 8) 5 X 8 = 40 Marks

2. What are Bioassays? and plant used for the same
3. Control measures of air pollution
4. Ozone depletion & its effect
5. Deforestation
6. Activated sludge treatment
7. Biofertilizers
8. Tertiary treatment of sewage
9. Give classification of sewage treatment
10. Control measures of water pollution

Short Answers: (Any – 10) 3 X 10 = 30 Marks

11. Define xenobiotics
12. Chemical used for sterilization of sewage water
13. Biological oxygen demand
14. Composition of sewage
15. Difference between adsorption & absorption
16. Devices used to control air pollution
17. VAM biofertilizer
18. Convectional energy sources
19. Biogas plant structure
20. What is Bioluminescence
21. GM used in cleaning environment pollution