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PB—12—2024

FACULTY OF SCIENCE

B.Sc. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2024

(New Course)

BIOTECHNOLOGY

(Basic of Bioscience)

(Saturday, 06-04-2024)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

Note :— (i) All questions are compulsory.

(ii) Draw a neat and well labelled diagram wherever necessary.

1. Explain Whittaker's five kingdom system with merits and demerits. 15

Or

(a) Prokaryotic cell 8

(b) Eukaryotic cell. 7

2. Describe seed, seed development structure, germination and control of seed germination. 15

Or

(a) Write a note on T.S. monocot root. 8

(b) What is fruit ? Describe types of fruit. 7

3. Write a note on nuclear and embryo transplantation with example. 15

Or

Write on the following :

(a) Vermiculture 8

(b) Male reproductive system. 7

4. Explain effect of environment on growth and prevention of fungal growth in detail. 15

Or

Write on the following :

(a) Nutrition 8

(b) Reproduction. 7

5. Write notes on (any *three*) : 15

(i) Ultra structure of typical fungal cell

(ii) Poultry farming

(iii) Gestation

(iv) Diversity of living world

(v) Flower.

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PB—01—2024

FACULTY OF SCIENCE

B.Sc. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2024

(New Course)

BIOTECHNOLOGY

(Functional English)

(Tuesday, 02-04-2024)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

Note :— (i) All questions are compulsory.

(ii) All questions carry equal marks.

1. Explain various word formation processes with examples. 15

Or

(A) Analyse free morpheme with examples. 7

(B) State Morphological Analysis of : 8

(i) Developmental

(ii) Decolonization

(iii) Nationalism

(iv) Commonwealth.

2. Define 'Role Playing' and mention the skills that can be developed by Role Playing. 15

WT

(2)

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Or

- (A) Discuss close word classes. 7
- (B) Mention dos and dont's of group discussion. 8
3. What is a Phrase ? State types and their functions. 15

Or

- (A) Spot the errors and rewrite correct sentences : 7

- (1) I take my the lunch at 2:00 p.m.
- (2) Mumbai is a largest city of India.
- (3) There is many rain in winter.
- (4) This books are very important.
- (5) All peoples have gathered here.
- (6) Everyone have to take National pledge.
- (7) The children is going to school.

- (B) Do as directed : 8

(1 to 4 : Change the voice)

- (1) Many people are developing theories.
- (2) Don't smoke in the public place.
- (3) Will they complete it before deadline ?

(4) The Zebra was attacked by the lion.

(5 to 8 : Change the Narration)

(5) My brother said to Tim, "You have to practice more".

(6) John said to his sister, "Don't follow me, now".

(7) "What a terrible sight it is !" said the traveller.

(8) My mother asked, "Will you come home by tomorrow ?"

4. What is business report ? Mention steps to draft a business report. 15

Or

(A) Write a letter to your friend congratulating him for his success in NEET Exam. 7

(B) Write an essay on 'students should get limited access to the internet. 8

5. Write short notes on any *three* : 15

(a) Bound morpheme

(b) Skills needed for GD

(c) Seminar

(d) Articles

(e) Resume.

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PB—06—2024

FACULTY OF SCIENCE

B.Sc. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2024

(New Course)

BIOTECHNOLOGY

(Introduction to Biotechnology)

(Thursday, 04-04-2024)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

Note :— (i) All questions are compulsory.

(ii) All questions carry equal marks.

(iii) Draw neat diagram wherever necessary.

1. What are transgenic plants ? Describe in detail transgenic plants. 15

Or

(a) Describe in detail Biopesticides. 8

(b) Explain in brief plant tissue culture. 7

2. Describe in detail transgenic animal and their applications. 15

Or

(a) What is monoclonal antibodies ? Explain Monoclonal antibodies in detail. 8

(b) Explain in brief stem cells. 7

WT

(2)

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3. Define enzyme. Describe in detail classification of enzymes. 15

Or

(a) Ethanol production 8

(b) Cheese making 7

4. What is Biogas ? Describe in detail Biogas production. 15

Or

(a) Biodiesel 8

(b) Ethical and social impact of Biotechnology 7

5. Write short notes on (any *three*) : 3×5=15

(a) Rhizobium as a Biofertilizer

(b) Ag-Ab interactions

(c) Biodegradation

(d) Winery

(e) Solid waste management.

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PB—18—2024

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2024

(New Pattern)

BIOTECHNOLOGY

(Microbiology-I)

(Wednesday, 10-04-2024)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

Note :— (i) All questions are compulsory.

(ii) Draw neat diagram wherever necessary.

1. Describe in detail controversy abiogenesis. 15

Or

(a) Explain the Koch's postulates. 8

(b) Write a short note on Physiological significance of fermentation. 7

2. Describe in detail soil and agricultural microbiology. 15

Or

(a) Write a short note on medical microbiology. 8

(b) Write a short note on dairy microbiology. 7

3. Describe in detail ultra-structure and bacteria. 15

Or

(a) Write a short note on cell membrane of bacteria. 8

(b) Write a short note on ribosome of bacteria. 7

4. Describe in detail germination and sporulation of endospore. 15

Or

(a) Write a short note on Eukaryotic cell structure. 8

(b) Write a short note on exospores of bacteria. 7

5. Write short notes on any *three* of the following : 15

(i) Louis Pasteur

(ii) Space Microbiology

(iii) Magnetosome

(iv) Endoplasmic Reticulum

(v) PHB Granules.