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NB—12—2023

FACULTY OF SCIENCE

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

NOVEMBER/DECEMBER, 2023

BIOTECHNOLOGY

(New Course)

Paper—(CCBT–2A)

(Basic Bioscience)

(Monday, 04-12-2023)

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

Time—3 Hours

Maximum Marks—75

N.B. :— (i) *All questions are compulsory.*

(ii) *Draw a well labelled diagram wherever necessary.*

1. Describe Whittaker's five kingdom system in detail. 15

Or

(a) Describe prokaryotic cell in detail. 8

(b) Describe prebiological chemical evolution in detail. 7

2. What is flower ? Describe parts of flower with their functions. 15

Or

P.T.O.

WT (2) NB—12—2023

- (a) Describe types of fruit in detail. 8
- (b) Write a note on seed. 7
3. Describe female reproductive cycle with hormones. 15
- Or*
- (a) Write a note on Apiculture. 8
- (b) Write a note on Sericulture. 7
4. Write characteristics of fungus and explain reproduction of fungus with spore types. 15
- Or*
- (a) Prevention of fungal growth. 8
- (b) Explain ultra structure of typical fungal. 7
5. Write notes on (any *three*) : 15
- (i) Eukaryotic cell
- (ii) Photoperiodism
- (iii) Lactation
- (iv) Effect of Environment on Growth of Fungus
- (v) Vermiculture.

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NB—01—2023

FACULTY OF SCIENCE

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

NOVEMBER/DECEMBER, 2023

(New Course)

BIOTECHNOLOGY

(Functional English)

(Wednesday, 29-11-2023)

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

Time—Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) All questions carry equal marks.

1. Discuss various word formation processes with examples. 15

Or

(a) What is bound morpheme ? Explain with examples. 8

(b) State morphological structure of : 7

(i) Partiality

(ii) Colonialism

(iii) Shoemaker

(iv) Unemployment

2. Define open and closed word classes. 15

Or

(a) Explain functions of adverb phrase. 8

(b) Importance of seminar. 7

P.T.O.

WT

(2)

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3. Mention skills needed to succeed in group discussion and its Dos and dont's. 15

Or

- (A) Spot the errors and rewirte correct sentence : 7

- (i) Honesty is a best policy.
- (ii) The childrens ran out to the garden.
- (iii) There is many unemployment in the country.
- (iv) Neither of the two books were found useful.
- (v) The cyclone effected citizens.
- (vi) Twenty kilometres are a long distance.
- (vii) They sold mcuh tickets.

- (B) Do as directed (1 to 4 : change the voice) : 8

- 1. They have discovered some fruits.
- 2. Please, bring all papers, safely.
- 3. Did you purchase the book ?
- 4. This poem had been written by keats.

(5 to 8 : change the narration)

- 5. Rucha said to Sam, "Humans are mortals."
- 6. Sharma told me, "Please, sit here till I come back."
- 7. Raj said, "Alas ! my pet died yesterday."
- 8. Tomes said to Mary, "Have you finished yesterday's homework ?"

WT

(3)

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4. What is scientific report ? Discuss elements of scientific report. 15

Or

(a) Draft a letter to complain about the contaminated water supply in your area addressing to the Commissioner, Municipal Corporation of your city. 7

(b) Write an essay on “The most inspirational person in my life”. 8

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

(a) Free morpheme

(b) Adjective phrase

(c) Process of GD

(d) Demonstratives

(e) Importance of resume.

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NB—18—2023

FACULTY OF SCIENCE AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2023

(New Course)

BIOTECHNOLOGY

(Microbiology-I)

(Wednesday, 6-12-2023)

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

Time—3 Hours

Maximum Marks—75

N.B. :- (i) Attempt *all* questions.

(ii) Illustrate your answers with suitably labelled diagrams, wherever necessary.

1. Describe in detail spontaneous generation ? Explain the Redi's experiment. 15

Or

(a) Write a short note on physiological significance of fermentation. 8

(b) Explain the Koch's postulates. 7

P.T.O.

WT

(2)

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2. Describe in detail food and dairy microbiology. 15

Or

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

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

3. What is cytoplasmic inclusion ? Give any *two* examples of it along with function. 15

Or

(a) Write a short note on ribosome of bacteria. 8

(b) Write a short note on mesosome. 7

4. Describe in detail endospore and exospores with example. 15

Or

(a) What are the differences between Spore and Cyst. 8

(b) Write a short note on eukaryotic cell function. 7

5. Write short notes on any *three* out of four : 15

(a) Micrographia

(b) Agricultural Microbiology

(c) Nucleoid

(d) Golgi apparatus.

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