



RAN-2403000503028001

B. Sc. (NEP) (Sem. - III) Examination November - 2025

Bioscience (Microbiology) - Major-2 : BM-MJ-302 : Microbial Genetics

Time: 1 Hour]
[Total Marks: 25
સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book
- (2) Figures to the right indicate full marks.
- (3) Draw neat & clean diagram wherever necessary.

Seat No.:

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Student's Signature

Q. 1 Multiple choice questions: (Any Five)
05

1. Which of the followings is a nucleoside?
 - a. ATP
 - b. Adenosine
 - c. CTP
 - d. All
2. A process in which RNA is synthesized from DNA is called _____.
 - a. Transformation
 - b. Transcription
 - c. Translation
 - d. All
3. Radioactive isotopes are used in DNA & Protein by _____.
 - a. Watson and Crick
 - b. Avery , McCarty and Macleod
 - c. Griffith and Avery
 - d. None
4. Which of the following is a non-sense codon?
 - a. UAG
 - b. UGA
 - c. UAA
 - d. All
5. _____ is an example of gene mutation
 - a. Frame shift mutation
 - b. Lethal mutation
 - c. Biochemical mutation
 - d. Chromosomal mutation
6. Which of the following is a mutagen?
 - a. Some chemicals
 - b. Some viruses
 - c. Some pollutant
 - d. All

Q. 2 Write an essay on - DNA as genetic material.
10
OR
Q. 2 Answer the following questions.
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1. Write a note on fine structure of gene.
2. Describe in brief transformation experiment.

Q. 3 Write a detailed account on Mutation.
10
OR
Q. 3 Answer the following.
10

1. Describe in brief characteristics of Genetic code.
2. Write a note on RNA polymerase.