

Seat No. _____

QP-2870

Total No. of Pages : 3

OCT_NOV_2024 WINTER EXAMINATION

2354 Bachelor of Science

Sub. Name: MICROBIOLOGY -VII (MICROBIAL GENETICS & MOLECULAR BIOLOGY)

Sub. Code: 94265

Day and Date: JANUARY ,02-01-2025

Total Marks: 40

Time: 10:30 AM To 12:00 PM

- Instructions: 1. All questions are compulsory
2. Draw neat labelled diagrams wherever necessary
3. Figures to the right indicate full marks

Q1) Rewrite the following sentences choosing the correct alternatives given below. [8]

i. Frame shift mutations are caused by -----

- ~~A.~~ Acridine dyes
- B. 5- bromouracil
- C. Nitrous acid
- D. Hydroxyl amine

ii. The pili are encoded by -----

- A. F- Plasmid
- B. R Plasmid
- C. Metabolic plasmid
- D. Virulence plasmid

iii. ----- is initiation codon.

- A. AUG
- B. UGA
- C. UAA
- D. UGA

iv. ----- DNA repair system depends on visible light.

- A. Base Excision
- B. Nucleotide excision
- C. Photo reactivation
- D. SOS

v. Split genes start and end with -----

[1]

P.T.O.



- A. Introns
- B. exons
- C. recons
- D. citrons

vi. ----- truly brings induction of Lac operon.

- A. Glucose
- B. Allocates
- C. Lactose
- D. Galactose

vii. Intake of the naked DNA from the environment by the cell is called as -----

- A. Transformation
- B. Transduction
- C. Conjugation
- D. Vertical gene transfer

viii. ----- is the left handed helical DNA.

- A. A
- B. B
- C. C
- D. Z

Q2) Attempt following question (Any Two)

[16]

- a. What is Plasmid? Explain types and their properties.
- b. Discuss various properties of genetic code.
- c. Explain DNA repair by Photo reactivation and Excision repair.

Q3) Write short notes on (Any Four)

[16]

- 4 a. A form of DNA
- 4 b. Structure of Lac operon.
- 2 c. Split gene.
- 3 d. pBR322.
- e. Spontaneous mutation.
- f. Competence.

[2]

P.T.O.