



K21U 0890

Reg. No. :

Name :

IV Semester B.Sc. Degree (CBCSS – Sup./Imp.) Examination, April 2021
(2014 -'18 Admissions)

GENERAL COURSE IN MICROBIOLOGY
4 A14 MCB : Microbial Genetics and Genetic Engineering

Time : 3 Hours

Max. Marks : 40

Instruction : Draw diagrams wherever necessary.

SECTION – A

Answer **all** questions. **Each** question carries **1** mark. (4×1=4)

1. Name a bacteriophage mediating generalized transduction.
2. The Competence development in *Haemophilus influenzae* is achieved by growing organism on _____
3. A mutation that causes the change of UUG codon to UAG codon is called _____
4. The plasmid from *Agrobacterium tumefaciens* that is widely used in rDNA technology is _____

SECTION – B

Answer **any seven** questions. **Each** question carries **2** marks. (7×2=14)

5. One gene-one enzyme hypothesis
6. Genotype
7. Lytic cycle
8. Col plasmids
9. Yeast plasmids
10. Topoisomerases

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11. Colony hybridization technique
12. Live recombinant vaccines
13. Distinguish test cross and Back cross
14. 'Dolly'.

SECTION – C

Write short notes on any **four** of the following. **Each** question carries **3** marks. **(4×3=12)**

15. Transduction
16. Yeast mating types
17. Production of recombinant human insulin.
18. Cloning vectors
19. F plasmid
20. Transposition

SECTION – D

Write essay on any **two** of the following. **Each** question carries **5** marks. **(2×5=10)**

21. Write a note on different types of mutagens and their mechanism of mutagenesis.
 22. Discuss about different types of plasmids in prokaryotes and their significance.
 23. Write a note on restriction enzymes and the methods for introduction of rDNA into host cells.
 24. What are GM foods ? Discuss the advantages and apprehensions about the GM foods.
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