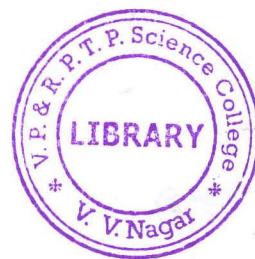


V.P & R.P.T.P SCIENCE COLLEGE
MICROBIOLOGY
USO6CMIC01
INTERNAL TEST



DATE : 06/03/2017

Time : 11:00 a.m to 12:30 p.m

TOTAL MARKS : 25

Note: Figures on the right indicate marks

Que 1) Attempt the following multiple choice questions: (03)

- A) When Nitrous acid acts on Guanine it is converted to -
- | | |
|--------------|-------------------|
| i) Xanthine | iii) Hypoxanthine |
| ii) Cytocine | iv) Adenine |
- B) Repair of Thymine dimer damaged DNA is possible by -
- | | |
|-------------------------------|------------------------|
| i) Nucleotide excision repair | iii) Photoreactivation |
| ii) SOS repair | iv) All of these |
- C) Barbara Mcklintok discovered -
- | | |
|-----------------|----------------------------|
| i) Plasmids | iii) Transposable elements |
| ii) Conjugation | iv) Transduction |

Que 2) Attempt the following short questions: (Any two) (04)

- 1) Write the contribution of: i) Luria and Delbrück (ii) Joshua and Esther Lederberg
- 2) Differentiate between Homologous and Non Homologous Recombination.
- 3) How was the process of transformation discovered?

Que 3) Discuss the methods of isolation of antibiotic resistant mutants and auxotrophic mutants. (06)

OR

Que 3) Write the mode of action of: (06)

- a) U.V radiation
- b) EMS

Que 4) Explain nucleotide excision repair mechanism of DNA . (06)

OR

Que 4) Define Reversion of mutation & explain Ame's test. (06)

Que 5) Explain the mechanism of transformation in *Streptococcus pneumoniae* . (06)

OR

Que 5) Discuss the mechanism of specialized transduction citing a suitable example. (06)