

REPEATED QUESTIONS SEM. IV

MICROBIOLOGY

SHORT QUESTIONS

UNIT. I

1. LAW OF SEGREGATION.
2. PROVE THAT DNA IS GENETIC MATERIAL
 1. GRIFFITH EXPERIMENT
 2. HARSHY & CHASE EXPERIMENT
3. LINKAGE
4. TRANSPOSONS.
5. PLASMIDS

~~SHORT~~ QUESTIONS; EASSY'S

1. WRITE A EASSY ON SEMICONSERVATIVE DNA REPLICATION.
2. WRITE A EASSY ON WATSON & CRICK DNA / B-DNA STRUCTURE.
3. WRITE A EASSY ON NOTES ON
 1. ALLELS
 2. CROSSING OVER.
 3. LAW OF INDEPENDENT ASSORTMENT.

UNIT. II

SHORT QUESTIONS

1. MUTAGENS - [PHYSICAL & CHEMICAL]
 2. CONJUGATION
 3. TRANSFORMATION
 4. TRANSDUCTION.
- (OR)
ACCOUNT ON GENE TRANSFER AMONG BACTERIA
- 8 SOS REPAIR.

EASSY

1. WRITE A EASSY ON DNA DAMAGE & REPAIR.

eg: FRAME SHIFT

DELETION

INVERSION

INSERTION

TANDUM DUPLICATION

} DNA
DAMAGE

REPAIR

NCR

BER

SOS

2. WRITE A EASSY ON SPONTANEOUS & INDUCED MUTATIONS.

8

UNIT - III

SHORT QUESTIONS

1. Genetic code
2. Lac operon
3. Wobble's Hypothesis
4. Mutation
5. Ribosomes
6. tRNA

EASY QUESTIONS

1. WRITE A SHORT NOTES ON RNA POLYMERASE & RNA BIOSYNTHESIS
OR
TRANSCRIPTION MECHANISM.
2. WRITE A OUTLINES ON PROTEIN BIOSYNTHESIS [TRANSLATION MECHANISM]
3. SHORT NOTES ON ONE GENE ONE ENZYME HYPOTHESIS, ONE GENE ONE PRODUCT
4. SHORT NOTES ON
 - a) RECON
 - b) CISTRON
 - c) CONSTITUTIVE GENE
 - d) MERRINBERG EXPERIMENT

UNIT IV

SHORT

1. RESTRICTION ENDONUCLEASES
 2. PBR 322/ pBR327
 3. LIGASES
 4. DNA POLYMERASES.
- S- GENOMIC LIBRARY

EASY

1. WRITE THE PRINCIPLES OF GENE CLONING. OR GENETIC ENGINEERING - STEPS
2. WRITE APPLICATIONS OF GENETIC ENGINEERING - IN INDUSTRY, AGRICULTURE, MEDICINE
3. WRITE A NOTES ON cDNA SYNTHESIS, cDNA LIBRARY,
4. SHORT NOTES ON
 1. HELICASES
 2. SSB PROTEINS
 3. PRIMAASE.
 4. AUXOTROPHS
 5. AMES TEST.