

GURUDAS COLLEGE
INTERNAL EXAMINATION – 2020
BSc (SEMESTER – IV) CBCS
MICROBIOLOGY (GEN)

PAPER: CC-4/GE4: MICROBIAL GENETICS AND MOLECULAR BIOLOGY

FULL MARKS : 50

TIME: 2 HOURS

GROUP – A

(25 MARKS)

Q.1 Answer ALL Questions:

10X2.5=25

- a) What is Nucleoside & Nucleotide?
- b) State the differences between DNA & RNA.
- c) Write down Four important characteristics of B-DNA.
- d) State the differences between A,B & Z DNA.
- e) What do you mean by DNA Replication?
- f) What is Bi-directional Replication?
- g) What is Helicase ? Mention its role in replication.
- h) What do you mean by Semi conservative mode of DNA Replication?
- i) What is Promoter?
- j) State the differences between transcription and replication.

GROUP – B

(15 MARKS)

Q.1 Answer ANY THREE Questions:

3X5=15

- a) Write down the structure of a Nucleotide & Nucleoside?
- b) State the differences between DNA & RNA.
- c) What is the differences between Conservative & Semiconservative mode of replication?
- d) Mention the position of a supercoiled & linear DNA in Agarose gel electrophoresis diagrammatically.
- e) What do you mean by Hyperchromicity of DNA?
- f) What is SDS-PAGE? Mention the role of SDS here.
- g) How many type of RNA are present? Mention their types.
- h) State the differences between A,B & Z DNA.

GROUP - C

(10 MARKS)

ANSWER ALL QUESTIONS

1. Diagrammatically demonstrate the Messelson & Sthal Experiment. 5
2. State the differences between Intrinsic & Extrinsic termination process. 5