



DG-3135
B. Sc. (Microbiology) (Sem. V) Examination
March/April – 2016
MB - XI : Microbial Genetics

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

<p>नीचे दर्शावेक निशानीवाणी विगतो उत्तरवकी पर अवश्य लपनी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : B. Sc. (Microbiology) (Sem. V)</p> <p>Name of the Subject : MB - XI : Microbial Genetics</p> <p>Subject Code No. : 3 1 3 5 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : □ □ □ □ □ □</p> <p style="text-align: center; border: 1px solid black; border-radius: 15px; padding: 10px;">Student's Signature</p>
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- (2) Figures to the right indicate full marks of the question.
(3) Draw neat and labelled diagrams wherever necessary.

Q 1 Give specific answers:

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- a) What are histones? Enlist its types found in eukaryotic cell.
- b) What is central dogma of life?
- c) What is recombination? Enlist its types.
- d) Define:
 - i. Merozygote.
 - ii. Host restriction.
- e) Differentiate between Mutation and Mutagen.
- f) State the significance of RecA protein in repair mechanism.

Q 2 Answer any TWO of the following:

12

- a) Describe the patterns of DNA synthesis.
- b) Write on the initiation process of protein synthesis.
- c) Give the detail account of spontaneous mutation.

Q 3 Attempt any TWO of the following:

16

- a) Define Replicon. Describe the replication machinery.
- b) Describe the process of transcription in bacteria.
- c) Explain in detail: DNA transformation.

Q 4 Write short note on any TWO of the following:

10

- a) DNA structure.
 - b) Bacterial Plasmids.
 - c) Mismatch repair.
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