

SUBJECT: GENETICS & MOLECULAR BIOLOGY

Day: -Friday
Date: 12/04/2019

S-2019-1216

Time 03.00 PM TO 06.00 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat labeled diagram **WHEREVER** necessary.
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Q.1 Describe the process of translation in eukaryotes and compare it with translation in prokaryotes. (15)

OR

What is feedback inhibition? How does it regulate the synthesis of amino acids? (15)
Explain with examples.

Q.2 a) Name and describe the vectors used for cloning large DNA fragments. (10)

b) Name and describe the action of different antibiotics that block the synthesis of precursors. (05)

Q.3 Attempt any **THREE** of the following: (15)

- a)** Give the use of rRNA technology in combating infectious diseases.
- b)** Compare the different methods of DNA sequencing.
- c)** Justify: The Genetic code is triplet non overlapping code.
- d)** Describe in short: Protein sorting in the cell.

Q.4 Write short notes on any **THREE** of the following: (15)

- a)** Positive regulation
- b)** Termination of translation
- c)** One gene one polypeptide hypothesis
- d)** Blotting techniques

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