

**M. SC. (MICROBIOLOGY) SEM-I (C.B.C.S.) (2012 COURSE) :
SUMMER - 2018**

SUBJECT: GENETICS AND MOLECULAR BIOLOGY

Day: Monday
Date: 16/04/2018

S-2018-0903

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 diagrams **WHEREVER** necessary.
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Q.1 Describe in detail the translation in prokaryotes and comment on (15)
“protein sorting”.

OR

Describe in detail the steps involved in c-DNA library making.

Q.2 a) What is feed back inhibition, Elaborate with the suitable example. (08)

b) What are transgenic plants? Elaborate on its importance with suitable examples. (07)

Q.3 Write short notes on **ANY THREE** of the following: (15)

- a) Nucleosome structure
- b) Positive regulation of maltose operon
- c) Typical bacterial Promoter.
- d) Automated DNA sequencing techniques

Q.4 Comment on **ANY THREE** of the following: (15)

- a) Drugs manufactured using recombinant DNA Technology.
- b) Methods of cutting and joining DNA molecules.
- c) Antibiotics that affect gyrase.
- d) Protein engineering.

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