

4. a) What is transcription? Discuss the mechanism of transcription in prokaryotes

OR

b) Discuss the process of RNA splicing

5. a) Give an account on Genetic code

OR

b) Explain protein folding and protein targeting

6. a) Explain the mechanism of gene regulation

OR

b) Discuss the application of RNAi technology in gene silencing

[29/II Y/211]

[Aug-11]

[SPDBT-201]

M.Sc. DEGREE EXAMINATION

Biotechnology

II YEAR

MOLECULAR BIOLOGY

(Effective from the admitted batch 2009-10)

Time: 3 Hours

Max.Marks: 70

Instructions: All parts of the unit must be answered in one place only.
Figures in the right hand margin indicate marks allotted.

SECTION-A

1. Answer any **Four** of the following: (4x5=20)

- a) Hetero chromatin
- b) Spilt Genes
- c) RNA polymerases
- d) Promoters
- e) Wobble hypothesis
- f) Enhancer proteins
- g) Attenuation

SECTION-B

Answer all questions: (5x10=50)

2. a) Give an account on organization of genetic material in eukaryotes

OR

b) Write about the special types of chromosomes

3. a) Describe Messelson-Stahl experiment

OR

b) Discuss the types of DNA repair mechanisms