Code No. 4159 / CBCS / NONCBCS / N

FACULTY OF SCIENCE
M.Sc. II-Semester (CBCS / NONCBCS) (New) Examination, May / June 2015
Subject: Biochemistry
Paper: II
Molecular Biology

Time: 3 hours
Max. Marks: 80

Note: Answer all questions from Part-A and Part-B. Each question carries 4 marks in Part-A and 12 marks in Part-B.

PART – A (8 x 4 = 32 Marks)
(Short Answer Type)

1 mt DNA replication
2 Fidelity of replication
3 DNA photolyases
4 Role of BRCA in DNA repair
5 Actinomycin D
6 Promoters
7 Isoprenylation
8 PEST-sequences

PART – B (4 x 12 = 48 Marks)
(Essay Answer Type)

9 a) Outline various steps involved in replication of circular chromosome by rolling circle model. OR

   b) Describe the roles of various eukaryotic DNA-polymerases.

10 a) Outline DNA repair by Excision – repair mechanisms. OR

    b) Describe the mechanism of mismatch repair in E.coli.

11 a) Differentiate between eukaryotic and prokaryotic RNA-polymerases. OR

    b) Describe the structure of Ribosomes.

12 a) Define signal peptide and describe protein targetting to mitochondria. OR

    b) Outline the role of ubiquitin in protein degradation.

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