M.Sc., REGENERATIVE MEDICINE DEGREE EXAMS (2013-2014 Batch onwards) FIRST YEAR PAPER II – CELL AND MOLECULAR BIOLOGY

Q.P. Code: 281502

Time: Three hours Maximum: 100 marks

I. Elaborate on : $(2 \times 20 = 40)$

1. Mention the Central Dogma of Molecular Biology. Write in detail about protein transcription and translation.

2. Describe the structure of the eukaryotic cell membrane. Write in detail about the various mechanisms of transport across the cell membrane.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Yeast two-hybrid system
- 2. Nucleosome
- 3. Histones
- 4. Lampbrush chromosomes
- 5. Active Transport
- 6. Polymerase Chain Reaction
- 7. Splicing
- 8. Structure of DNA
- 9. Transposons
- 10. Types and Functions of Eukaryotic RNA polymerases
