QP Code: 313020 Reg. No......

## Third Year B.Sc. Medical Biochemistry Supplementary Examinations August 2024 Metabolism III

## (2016 Scheme)

Time: 3 Hours Total Marks: 100

- Answer all questions to the point neatly and legibly Do not leave any blank pages between answers
   Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essay (2x15=30)

- 1. Give a detailed account of the transcription process and its regulation. Name inhibitors of transcription.
- 2. Explain the catabolism of purine nucleotides and their abnormalities due to excessive catabolism

Short Essay (2x10=20)

- 3. Enumerate the steps of recombinant DNA technology and its applications
- 4. Describe the organization of chromatin in nucleus

Short Answers (6x5=30)

- 5. Applications of Polymerase Chain Reaction (PCR)
- 6. Protein targeting
- 7. Summarize the procedure of Gene therapy
- 8. Mechanisms of DNA repair
- 9. Salient features of Genetic code
- 10. Post translational modifications

Comment on (10x2=20)

- 11. Reverse transcriptase
- 12. Aminoacyl tRNA synthetase
- 13. Transgenic animals
- 14. Point mutation
- 15. Okazaki fragments
- 16. Unusual bases in tRNA
- 17. DNA Probe
- 18.Lac operon.
- 19. Ribozymes
- 20. Topoisomerases

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