

QP Code: 313020

Reg. No.....

**Third Year B.Sc. Medical Biochemistry Regular/Supplementary
Examinations February 2023
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. Explain the process of replication in prokaryotes and state the salient differences between prokaryotic and eukaryotic replication.
2. Discuss the steps of transcription. Add a note on post-transcriptional modifications.

Short Essay

(2x10=20)

3. DNA repair.
4. Salvage pathway of purines.

Short Answers

(6x5=30)

5. Describe the structure and organization of DNA.
6. PCR (Polymerase Chain Reaction).
7. Genetic code.
8. Vectors in recombinant DNA technology.
9. microRNA.
10. Nucleotide analogues.

Comment on

(10x2=20)

11. Point mutation.
12. Inhibitors of translation.
13. Orotic aciduria.
14. Restriction endonuclease.
15. Operon concept in gene expression.
16. Telomere.
17. Gene switching.
18. GMOs (Genetically Modified Organisms).
19. Western blot.
20. Lesch-Nyhan syndrome
