

**Third Year B.Sc. Medical Biochemistry Supplementary Examinations
July 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 translation in Eukaryotes and state the salient differences in Prokaryotes.
2. Discuss the de novo synthesis of purines. Add a note on its regulation.

Short Essay

(2x10=20)

3. Mutation.
4. Gout.

Short Answers

(6x5=30)

5. Post translational modifications.
6. Mitochondrial DNA.
7. tRNA.
8. Gene Therapy.
9. Okazaki fragments.
10. RFLP (Restriction Fragment Length Polymorphism)

Comment on

(10x2=20)

11. Enhancers and silencers.
12. Inhibitors of replication.
13. Lesch-Nyhan syndrome.
14. Restriction endonuclease.
15. Operon concept in gene expression.
16. Chaperones.
17. Reverse transcriptase.
18. Mismatch repair.
19. FISH (Fluorescent in Situ Hybridization)
20. Wobble hypothesis
