

QP Code: 313020

Reg. No.....

**Third Year B.Sc. Medical Biochemistry Supplementary Examinations  
October 2022  
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 de novo synthesis of purine nucleotides and how it is degraded in liver
2. Illustrate the process of DNA replication and its regulation. Explain the effect of inhibitors

**Short Essay**

**(2x10=20)**

3. Techniques in gene therapy with examples of successful applications
4. DNA repair mechanisms.

**Short Answers**

**(6x5=30)**

5. Post translational modifications
6. Advantages and disadvantages of animal cloning
7. Molecular scissors
8. Histones
9. Blot techniques.
10. Phases of cell cycle

**Comment on**

**(10x2=20)**

11. Monosodium urate crystals
12. Point mutation
13. Xanthine oxidase
14. RTPCR
15. Apoptosis
16. Cosmid
17. Kornberg's enzyme
18. Ame's test to detect mutagenesis
19. Nick translation
20. Snurps

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