

(i) Printed Pages : 2

Roll No. ....

(ii) Questions : 9

Sub. Code : 

1	3	8	2	3
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Exam. Code : 

5	0	5	2
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**B.Sc. (Hons.) (Bio-Technology) FYUP 2<sup>nd</sup> Semester  
(2055)**

**BIOCHEMISTRY**

**Paper : BIOT203**

**Time Allowed : Three Hours]**

**[Maximum Marks : 68**

**Note :—** Attempt **FIVE** questions in all. Q. No. 1 is compulsory.  
Attempt **ONE** question from each unit.

1. Attempt the following :

- |  |   |
|--|---|
| (a) Define Glycogenolysis.                             | 2 |
| (b) What is Salvage pathway ?                          | 2 |
| (c) What is Substrate level Phosphorylation ?          | 2 |
| (d) What are Nutritionally Non-Essential amino acids ? | 2 |
| (e) What are Porphyrins ?                              | 2 |
| (f) Define Gluconeogenesis.                            | 2 |

**UNIT—I**

- |   |   |
|---|---|
| 2. (a) Write about role of ATP and structural basis of its potential. | 7 |
| (b) Discuss Substrate level phosphorylation.                          | 7 |

3. Write notes on :

(a) Activated Carriers

(b) Coupled Reactions.

7×2

### UNIT—II

4. Discuss steps of Glycolysis. Also deliberate on Feeder pathways of Glycolysis. 14

5. Elaborate on amphibolic Nature of Kreb's cycle and its Regulation. 14

### UNIT—III

6. What is  $\beta$ -Oxidation ? Discuss steps involved in  $\beta$ -oxidation of saturated fatty acids. 14

7. Discuss process of formation, functions and physiological significance of Ketone Bodies. 14

### UNIT—IV

8. Deliberate on role of amino acids as precursors of Bile pigments and biogenic amines. 14

9. Discuss steps in the biosynthesis of purines and pyrimidines. 14