

**FIRST YEAR B.PHARM. EXAM****Paper IV – BIOCHEMISTRY****Q.P. Code: 564254****Time: Three Hours****Maximum: 100 marks****(180 Min) Answer ALL questions in the same order****I. Elaborate on:****Pages Time Marks
(Max.)(Max.)(Max.)**

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| 1. Define lipids. Name the essential fatty acids. Explain the pathway of beta-oxidation of palmitic acid. Add a note on its energetics. | 19 | 33 | 20 |
| 2. What are vitamins, Classify them. Explain the sources, chemistry, functions and deficiency manifestations of vitamin A. | 19 | 33 | 20 |

II. Write notes on:

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|--------------------------------|---|---|---|
| 1. Ribonucleic acid (RNA). | 3 | 8 | 5 |
| 2. Absorption of glucose. | 3 | 8 | 5 |
| 3. Iso enzymes. | 3 | 8 | 5 |
| 4. Gluconeogenesis. | 3 | 8 | 5 |
| 5. Insulin. | 3 | 8 | 5 |
| 6. Functions of iron. | 3 | 8 | 5 |
| 7. Porphyrins. | 3 | 8 | 5 |
| 8. Classification of proteins. | 3 | 8 | 5 |

III. Short Answers:

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| 1. Define transamination. | 1 | 5 | 2 |
| 2. Define BM | 1 | 5 | 2 |
| 3. Name the bile salts. | 1 | 5 | 2 |
| 4. What is ADH? What is its function? | 1 | 5 | 2 |
| 5. Mention two reactions in which NADH participates. | 1 | 5 | 2 |
| 6. Draw structure of immunoglobulins. | 1 | 5 | 2 |
| 7. Define anaemia. | 1 | 5 | 2 |
| 8. What is heparin? Function? | 1 | 5 | 2 |
| 9. Define glycogenesis. | 1 | 5 | 2 |
| 10. What are allosteric enzymes? Give examples. | 1 | 5 | 2 |
