

[LB 504]

AUGUST 2012

Sub. Code: 4055

FIRST YEAR M.B.B.S DEGREE EXAM

Paper V – BIOCHEMISTRY – I

Q. P. Code: 524055

Time: 180 Minutes

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

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|--|----|----|----|
| 1. What are the components of Mitochondrial Electron Transport Chain .Describe the events and inhibitors of Oxidative phosphorylation. | 16 | 25 | 15 |
| 2. Explain the significance and reactions of Hexose MonoPhosphate shunt and disorders associated to it. | 16 | 25 | 15 |

II. Write notes on:

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| 1. Isoenzymes of Lactate dehydrogenase and their significance. | 3 | 8 | 5 |
| 2. Functions, Deficiency Symptoms of Vitamin Thiamine. | 3 | 8 | 5 |
| 3. Calcium homeostasis and its disorder. | 3 | 8 | 5 |
| 4. Metabolic adaptation in Fed state. | 3 | 8 | 5 |
| 5. What are the various muco polysaccharides. Add a note on hyaluronic acid. | 3 | 8 | 5 |
| 6. Line Weaver Burk's Plot and its significance. | 3 | 8 | 5 |
| 7. Enzymes, coenzymes, inhibitors of Pyruvate Dehydrogenase Reaction. | 3 | 8 | 5 |
| 8. Alcohol metabolism | 3 | 8 | 5 |
| 9. Fredrickson's classification of hyperlipprotenemias. | 3 | 8 | 5 |
| 10. Mention the types of heteropolysaccharides and their functions. | 3 | 8 | 5 |

III. Short Answers on:

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|---|---|---|---|
| 1. Cardiolipin. | 1 | 5 | 2 |
| 2. Mention the types of fatty acid oxidation. | 1 | 5 | 2 |
| 3. What are the products of Arachidonic acid? | 1 | 5 | 2 |
| 4. Carnitine. | 1 | 5 | 2 |
| 5. Anomerism. | 1 | 5 | 2 |
| 6. How Haemoglobin binds to oxygen. | 1 | 5 | 2 |
| 7. Km Value and its significance. | 1 | 5 | 2 |
| 8. Bronze Diabetes. | 1 | 5 | 2 |
| 9. WHO criteria for Diagnosis of Diabetes mellitus. | 1 | 5 | 2 |
| 10. Zellweger's syndrome. | 1 | 5 | 2 |
