

**Q.P. Code: 105001**

**Reg. no.:** .....

**First Professional MBBS Degree Supplementary Examinations  
January 2018**

**BIOCHEMISTRY- PAPER I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw diagrams wherever necessary

**Essay**

**(10)**

1. Name the site where beta oxidation of fatty acid occurs. Describe the steps involved in beta oxidation of fatty acids. Explain how much energy is released in beta oxidation of one molecule of palmitic acid. (1+6+3)

**Short essays**

**(2x5=10)**

2. What are isoenzymes. Discuss the diagnostic importance of isoenzymes.
3. Discuss the regulation of glycogen metabolism

**Short notes**

**(5x3=15)**

4. Glucose transporters
5. Mention the enzyme defective in galactosemia. Add a note on the clinical features of galactosemia.
6. Formation and functions of nitric oxide.
7. ATP synthesis.
8. Monitoring of diabetes mellitus.

**Answer briefly**

**(5x2=10)**

9. GABA.
10. Dietary fiber.
11. Primary hyper oxaluria
12. Mention the significance of hexose monophosphate shunt pathway.
13. Reverse cholesterol transport.

**Give precise answers:**

**(5x1=5)**

14. Name two lipid storage disorders.
15. Name the vitamin and amino acid formed from tryptophan
16. Why sucrose is a non-reducing sugar.
17. Why orotic aciduria occur in type II hyper ammonemia
18. Name two acidic amino acids.