

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM**  
(Deemed to be University)

**MBBS DEGREE EXAMINATION – August 2018**  
**FIRST YEAR**

**BIOCHEMISTRY – PAPER I**

**Time : Three hours**

**Maximum : 80 marks**

**Answer ALL questions**  
**Draw diagrams wherever necessary**

**SECTION – A**

**I. Write essay on :** (1 x 10 = 10)

1. Describe in detail the different types of enzyme inhibition with examples.

**II. Write short notes on :** (4 x 5 = 20)

2. Metabolism of Galactose. Add a note on Galactosemia.
3. Fate of glucose 6 phosphate in the body
4. Biochemical functions of riboflavin
5. Folate trap.

**III. Answer briefly :** (5 x 2 = 10)

6. What are lipotropic factors? Give two examples.
7. What is electrophoresis and its principle?
8. Name antioxidant vitamins and its functions
9. Functions of Albumin
10. What is chemiosmotic theory of oxidative phosphorylation.

**SECTION – B**

**I. Write essay on :** (1 x 10 = 10)

11. Describe in detail the dietary source, recommended dietary allowance and biochemical functions of Vitamin A. Add a note on deficiency manifestations.

**II. Write short notes on :** (4 x 5 = 20)

12. Metabolism of ketone bodies
13. HDL metabolism
14. Laboratory investigations of different types of jaundice
15. Vitamin K functions

**III. Answer briefly :** (5 x 2 = 10)

16. What are essential amino acids?
17. What are biochemical alterations in Marasmus?
18. What are enzyme markers for Mitochondria, Golgi bodies, cytoplasm and lysosomes?
19. Name four Mucopolysaccharides.
20. What are the products formed from cholesterol.