## VINAYAKA MISSION'S RESEARCH FOUNDATIONS (Deemed to be University), SALEM

## Pharm.D DEGREE EXAMINATION - September 2021 **First Year**

## MEDICINAL BIOCHEMISTRY

Time: Three hours

Maximum: 70 marks

I. Write essays on any **TWO** questions: (2 x 15 = 30)

- 1. State glycolysis. Describe the biochemical pathway for the breakdown of glucose to pyruvate and lactate. Explain about the energetics.
- 2. Explain about factors affecting enzyme activity and about coenzymes and its biological role.
- 3. Discuss about various functions of liver and elaborate about any two types of liver function tests.
- II. Write short answers on any **SIX** questions:
  - 4. Explain about ATP and its biological significance.
  - 5. Discuss about Urea cycle.
  - 6. Write note on transport process across the cell membranes.
  - 7. Explain about Cholesterol and its functions.
  - 8. Write note on Porphyria.
  - 9. Write note on determination of sodium in body fluids.
  - 10. What are ketone bodies? Explain the development and importance of ketone bodies?
  - 11. Describe about genetic code and its characteristic features.

## III. Write short notes on any **FIVE** question:

- 12. What are bile salts?
- 13. Explain about Michaelis Menten equation.
- 14. Describe the significance of HMP Shunt pathway.
- 15. Describe about unsaturated fatty acids with examples.
- 16. What are nucleotides? Name four nucleotides.
- 17. Write note on urinary tract calculi.

 $(5 \times 2 = 10)$ 

 $(6 \times 5 = 30)$