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

## Pharm.D DEGREE EXAMINATION - July 2019 First Year

## **MEDICINAL BIOCHEMISTRY**

Time: Three hours

Maximum: 70 marks

- I. Write essays on any **TWO** questions: (2 x 15 = 30)
  - 1. Describe oxidation of fatty acids. Add a note on the energetic of  $\beta$  oxidation. (7+8)
  - 2. Explain the major steps involved in the messenger RNA transcription.
  - 3. Define HMP shunt. Explain in detail about HMP shunt with its significance. (3+12)
- II. Write short answers on any **SIX** questions:  $(6 \times 5 = 30)$ 
  - 4. Explain the mechanism of enzyme action.
  - 5. Explain the principle involved in ELISA technique along with its applications.
  - 6. Describe the catabolism of purine nucleotides.
  - 7. Write short note on the biological significance of cholesterol.
  - 8. Write the mechanism of oxidation phosphorylation.
  - 9. Mention about bilirubin formation and its normal serum and urine levels.
  - 10. Write about determination of chlorides and bicarbonates in the body fluids.
  - 11. Describe in brief about cyclic AMP along with its significance.

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

- 12. Define glycogenolysis.
- 13. What are nucleotides?
- 14. Mention some biological roles of aminoacids.
- 15. What is nitrogen balance?
- 16. Write about the laboratory tests for creatinine.
- 17. Define Atherosclerosis.

(5 x 2 = 10)