

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

**DIPLOMA IN OPERATION THEATRE TECHNOLOGY AND**  
**ANAESTHESIA TECHNOLOGY EXAMINATION**

**February 2020**

**First Year**

**BIOCHEMISTRY**

Time: Three hours

Maximum: 75 marks

**I. Write an essay on any ONE of the following: (1 x 20 = 20)**

1. Describe in detail about Citric acid cycle. Add a note on its regulation, inhibitors, energetic and amphibolic role of the pathway.
2. Write in detail about chemistry, source, RDA, biochemical functions, metabolism, deficiency manifestations and toxicity of Vitamin C.

**II. Write short notes on any TWO of the following: (2 x 10 = 20)**

3. LDL and HDL metabolism.
4. Factors affecting enzyme activity.
5. Define acid and base. Write about Renal regulation of pH.
6. Glucose Tolerance Test.

**III. Write short answers on any SEVEN of the following: (7 x 5 = 35)**

7. Henderson – Hasselbalch equation.
8. Function and deficiency of Riboflavin.
9. Classification and functions of lipids.
10. Magnesium.
11. HbA1C.
12. Iso enzymes.
13. Benedicts test.
14. Essential amino acids and its function.
15. Vitamin K cycle.
16. Hyponatremia.

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