

Q.P. CODE: 113016

Reg. No:

**First Year B.Sc Perfusion Technology Degree Supplementary
Examinations July 2025**

**Biochemistry
(2016 Scheme)**

Time: 3 Hrs

Max. Marks: 80

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays:

(2x10=20)

1. What is the normal blood calcium level. Discuss in detail the hormonal regulation of calcium. Write down its functions (1+6+3)
2. Discuss the source, RDA, functions and deficiency manifestations of vitamin A

Short notes:

(6x5=30)

3. Classification of Lipids
4. Enumerate the steps of anaerobic glycolysis
5. Secondary structure of proteins with examples
6. Metabolic acidosis
7. Hormonal regulation of water balance
8. Biologically important compounds formed from glycine

Answer briefly:

(10x3=30)

9. Functions of phospholipids
10. Biochemical functions of thiamine
11. Substrate level phosphorylation
12. Cori's cycle
13. Arterial blood gas analysis
14. Hypokalaemia
15. Reducing substances in urine
16. Anion gap
17. Fatty acid synthase complex
18. HDL cholesterol
