

**Q.P. Code 106001****Reg. No.:.....****First Professional MBBS Degree Supplementary Examinations**  
**March 2021****Biochemistry - Paper II****Time: 3 hrs****Max marks: 50**

- 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

**Essay (10)**

1. Describe the formation and excretion of bilirubin. Explain the significance of serum bilirubin and urobilinogen in the diagnosis of various types of jaundice (5+5)

**Short essays (2x5=10)**

2. Enumerate two hormones which affect calcium and phosphorus metabolism. Mention how these hormones regulate them in the body.
3. Absorption, transport and storage of iron in the body.

**Short notes (5x3=15)**

4. Name three B complex vitamins and its co-enzymes forms
5. Rickets
6. Folate trap
7. Metabolic acidosis
8. Name various blotting techniques and their significance

**Answer briefly (5x2=10)**

9. Biochemical basis of allopurinol in the treatment of gout
10. Define anion gap and mention its normal range.
11. List two clinical conditions of abnormal haemoglobin
12. One mechanism of activation of proto-oncogenes to oncogenes
13. Mention one function and one deficiency manifestation of vitamin B<sub>12</sub>

**Give precise answers (5x1=5)**

14. One element involved in wound healing
15. Enzyme defect in acute intermittent porphyria
16. Vitamin deficiency in pellagra
17. Folic acid antagonist used in the treatment of cancer
18. Immunoglobulin which serves as first line of defense

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