

**First Professional MBBS Degree Supplementary Examinations  
January 2020**

**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 chemistry, biochemical functions, requirements and deficiency symptoms of vitamin C (2+4+1+3)

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

2. Serum calcium homeostasis  
3. Applications of recombinant DNA technology

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

4. Functions of albumin  
5. Lesch-Nyhan syndrome  
6. Oncogenes  
7. Differential diagnosis of Jaundice by Laboratory tests.  
8. Acute intermittent porphyria

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

9. Uses of restriction fragment length polymorphism (RFLP)  
10. Biochemical basis of thalassemia  
11. Role of zinc  
12. Gout - Clinical features and Lab Diagnosis  
13. Name any two tumor markers and conditions in which they are elevated

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

14. Base-pairing rule  
15. Significance of hippuric acid excretion test  
16. Why vitamin B<sub>1</sub> deficiency leads to brain dysfunction.  
17. Biochemical role of vitamin K in coagulation  
18. Normal value of serum total protein

\*\*\*\*\*