

Q.P.Code 106001

Reg. No.:.....

First Professional MBBS Degree Supplementary Examinations -
February 2016

BIOCHEMISTRY - PAPER II

Time : 3 hrs

Max marks : 50

- **Answer all questions**
- **Draw diagrams wherever necessary**

Essay (10)

1. Describe the salvage pathways for purine and pyrimidine synthesis. Explain the biochemical basis of Lesch-Nyhan syndrome and Von Gierke's disease. (5+5=10)

Short essays (2x5=10)

2. Define clearance and how it is estimated. Add a note on its diagnostic importance.
3. Genetic code.

Short notes (5x3=15)

4. Draw a neat labeled diagram of DNA structure
5. Role of kidney in blood pH regulation
6. Mitochondrial DNA
7. Enumerate three post translational modifications of proteins with one example each
8. Principle of ELISA and two clinical applications in clinical diagnosis

Answer briefly (5x2=10)

9. One example each of detoxification by oxidation and conjugation
10. Enumerate two glomerular function tests
11. Enumerate primary and secondary bile acids
12. Four functions of plasma proteins
13. Two clinical conditions of hyper gammaglobinaemia

Give precise answers (5x1=5)

14. First pharmaceutical product of recombinant DNA technology for human use
15. Vitamin deficiency in beriberi
16. Anti hemorrhagic vitamin
17. Two radio isotopes used in the diagnosis and treatment
18. Active form of vitamin D
