

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

MBBS DEGREE EXAMINATION – August 2018
FIRST YEAR

BIOCHEMISTRY – PAPER II

Time : Three hours

Maximum : 80 marks

Answer ALL questions
Draw diagrams wherever necessary

SECTION – A

I. Write essay on : (1 x 10 = 10)

1. Define buffer. What are blood buffers? Add a note on Renal regulation of blood pH.

II. Write short notes on : (4 x 5 = 20)

2. Metabolism of phenylalanine and its clinical significance.
3. Mechanism of action of Group II hormones.
4. Explain bilirubin synthesis and its degradation.
5. Explain salvage pathway of purines.

III. Answer briefly : (5 x 2 = 10)

6. Explain glomerular filtration rate. Name two tests to estimate it.
7. Name four causes of respiratory acidosis
8. Hartnup's disease
9. Name four copper containing enzymes.
10. Biochemical functions of selenium.

SECTION – B

I. Write essay on : (1 x 10 = 10)

11. Explain transcription in Eukaryotes.

II. Write short notes on : (4 x 5 = 20)

12. Principle and clinical application of spectrophotometry
13. Mechanism of action of thyroid hormones
14. Genetic code
15. Explain different types of mutation with example.

III. Answer briefly : (5 x 2 = 10)

16. Orotic aciduria
17. Molecular defects and features in Maple syrup urine disease.
18. Name four diagnostic enzymes in liver diseases
19. Name antioxidant enzymes
20. Define principle of flame photometer.