

**2019 Scheme**

Q.P. Code: 115001

Reg. no.: .....

**First Professional MBBS Degree Supplementary (SAY) Examinations  
August 2021  
Biochemistry - Paper I**

Time: 3 Hours

Total Marks: 100

- 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

**Long Essays****(2x15=30)**

1. A 50 years old man with 3 years history of hypertension and occasional panic attacks reported to hospital with episode of throbbing headache, associated with excessive sweating. He gave history of similar attacks earlier. On examination, his BP was 180/100 mm Hg and pulse was 82/min. urine examination revealed very high levels of 24 hrs VMA.
  - What is the probable diagnosis
  - Name the aromatic amino acids
  - Describe the biochemical basis of symptoms and urinary finding
  - Describe the synthesis of any two biochemically important compounds from the parent amino acid (1+1+5+8)
2. Name the ketone bodies. Describe their synthesis and catabolism. Write the causes of ketosis. (2+10+3)

**Short essays****(5x8=40)**

3. Define porphyria. Classify porphyria and enumerate their salient features. Add a note on acute intermittent porphyria (1+4+3)
4. Cori's cycle and its significance (6+2)
5. Draw a neat labeled diagram of electron transport chain. Add a note on chemiosmotic hypothesis (5+3)
6. Describe the coenzyme form, sources, biomedical role and deficiency manifestation of syndrome (1+1+4+2)
7. Glycemic index: definition and importance (2+6)

**Short answers****(5x4=20)**

8. Lysosomes
9. Lipotrophic factors
10. Brown adipose tissue.
11. Folate trap
12. Functions of cholesterol

**Give Precise Answers****(10x1=10)**

13. Power house of the cell is -----
14. Marker enzyme for Golgi apparatus
15. Give two salient points to compare and contrast hexokinase and glucokinase
16. Function of albumin responsible for preventing edema
17. Enzyme defect in Von Gierkes disease
18. Biochemical defect in Lactose intolerance
19. Hetero polysaccharide having anticoagulant function
20. Rate limiting enzyme in cholesterol synthesis
21. Define gluconeogenesis
22. Normal value of total serum protein

\*\*\*\*\*

www.FirstRanker.com