

2019 Scheme

Q.P. Code: 116001

Reg. no.:

First Professional MBBS Degree Regular/Supplementary Examinations February 2023 Biochemistry - Paper II

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)**

- 35-year-old female, housewife, presented to the medicine department with excessive weakness, breathlessness and palpitations since 3 months. History revealed that she had complaints of excessive menstrual bleeding. She had followed strict vegetarian diet. Investigations revealed her hemoglobin was 7 gm/dl.
 - What is the probable diagnosis (1)
 - Describe the sources, RDA, functions, absorption, transport and deficiency of the mineral involved (1+1+3+3+2)
 - Describe the biochemical investigations and blood picture relevant to this case (4)
- Definition, steps and inhibitors of translation (1+1+3)

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

- Diagrammatically represent the structure of tRNA. Describe the functions of tRNA. (4+4)
- Principle and applications of Beer-Lamberts law. Add a note on colorimetry (3+5)
- Classify renal function tests. Describe clearance tests in detail (5+3)
- Describe PCR and its applications. Add a note on its significance in diagnosis of covid-19 (4+2+2)
- Discuss the structure and functions of immunoglobulin. Add a note on monoclonal antibodies (4+2+2)

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

- Contractile proteins
- Mucosal block theory
- Salvage pathway
- Effects of free radicals
- Detoxification by conjugation

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

- Biochemical defect in orotic aciduria
- Disease associated with DNA repair
- What is a telomere
- Function of calcium responsible for prevention of tetany
- Western blot
- Reverse transcriptase
- Benzoic acid, a food preservative, is detoxified by-----
- Two causes for respiratory acidosis
- Microalbuminuria
- Two functions of magnesium
