

M.D BIOCHEMISTRY

PAPER I

Q.P Code : 1301

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.



LONG ESSAY

2 X 20 = 40 Marks

1. Explain Bohr's effect. Describe its molecular mechanisms at the level of the lungs and at the peripheral tissue.
2. Describe the various levels of organization of proteins and methods to elucidate them.

SHORT ESSAY

6 X 10 = 60 Marks

3. Glycosaminoglycans
4. Radioimmunoassay
5. Gel filtration chromatography
6. Ultracentrifugation
7. Flame photometry
8. Henderson-Hasselbach equation and buffers

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Post Graduate Degree Examination – November - 2012

Time : 3 Hrs.

[Max. Marks : 100]

M.D BIOCHEMISTRY

PAPER II

Q.P Code : 1302

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.



LONG ESSAY

2 X 20 = 40 Marks

1. Oxidative phosphorylation
2. Describe the metabolism of aromatic amino acids

SHORT ESSAY

6 X 10 = 60 Marks

3. Metabolism in the fasting state
4. Salvage pathway
5. Monitoring a diabetic patient
6. Mutations
7. Ubiquitin
8. Telomerase

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Time : 3 Hrs.

[Max. Marks : 100]

M.D BIOCHEMISTRY

PAPER III

Q.P Code : 1303

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.



LONG ESSAY

2 X 20 = 40 Marks

1. Describe the structure of collagen. Explain the role of L-ascorbic acid in the formation of collagen. Discuss the clinical conditions produced as a result of mutations in the gene coding for collagen.
2. Describe the kinetics and mechanisms of action of enzymes. How are they regulated?

SHORT ESSAY

6 X 10 = 60 Marks

3. Protein energy malnutrition
4. Membrane transport
5. Iron metabolism
6. Role of hematopoietic vitamins in causing megaloblastic and pernicious anemia
7. Anti vitamins
8. Calcitriol

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M.D BIOCHEMISTRY

PAPER IV

Q.P Code : 1304

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.



LONG ESSAY

2 X 20 = 40 Marks

1. Describe the relevant diagnostic markers of myocardial tissue damage. Add a note on latest cardiac markers
2. Discuss in detail the laboratory evaluation of jaundice

SHORT ESSAY

6 X 10 = 60 Marks

3. Oral GTT and WHO criteria for diagnosis of diabetes mellitus
4. Glycated proteins and their clinical significance
5. Quality control in clinical Biochemistry
6. Oncofetal antigens
7. Neuropeptides
8. Renal clearance tests

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