

[KP 505]

Sub. Code : 4056

FIRST M.B.B.S. DEGREE EXAMINATION.

Revised (Non-Semester) Regulations

Paper VI — BIOCHEMISTRY — II

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks  
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Draw labelled diagrams wherever necessary.

Answer ALL questions.

I. Essay :

(1) Describe the sources, requirement, absorption, transport, storage forms, functions, deficiency and toxic manifestations of iron.

(1 + 1 + 3 + 2 + 2 + 4 + 5 + 2 = 20)

(2) Discuss urea cycle under the following headings :

(a) Site

(b) Sources of amino group

(c) Steps and

(d) Regulation. (1 + 1 + 10 + 3 = 15)

(3) Discuss about nucleic acids under following headings :

(a) Types

(b) Functions

(c) Components

(d) Chargaff's rule of DNA composition

(e) Different forms of DNA double helix

(f) Differences between DNA and RNA.

(1 + 3 + 2 + 2 + 3 + 4 = 15)

II. Write short notes on : (6 × 5 = 30)

(a) Post translational modifications with two examples.

(b) Alpha helical structure of a peptide.

(c) Buffer system in the body.

(d) Principles of electrophoresis and its clinical applications.

(e) Applications of genetic engineering.

(f) G-proteins.