

[KQ 1507] **MARCH 2007**

Sub. Code : 3009

**DIPLOMA IN CLINICAL PATHOLOGY
EXAMINATION.**

(New Regulations)

Paper II – BIOCHEMISTRY AND MICROBIOLOGY

Common to

(Candidates admitted from 1993-94 onwards)

and

(Candidates admitted from 2004-05 onwards)

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Section A and B should be answered in a SEPARATE
Answer Book.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

SECTION A

BIOCHEMISTRY

I. Essay.

1. How urea is synthesised? What are metabolic disorders of urea cycle? Mention normal blood urea concentration. (8 + 6 + 1 = 15)
2. Name Ketone bodies. Enumerate the steps in the synthesis of Ketone bodies. Name two conditions where there is increased production of Ketone bodies. (10)

II. Short notes.

(3 × 5 = 15)

(a) Glucose tolerance test.

(b) Biochemical evaluation of a case of suspected Myocardial infarction.

(c) What are Trace elements? How is Iron absorbed and transported in the body?

SECTION B

MICROBIOLOGY

III. Essay :

1. Enumerate the zoonotic diseases and write the pathogenesis and laboratory diagnosis of Human Brucellosis (Brucella Melitensis). (15)

2. Discuss the pathogenesis and laboratory diagnosis of Vibrio Cholera. (10)

IV. Short notes : (3 × 5 = 15)

(a) Live viral vaccines.

(b) Castaneda's method of blood culture.

(c) Polymerase chain reaction.