

C 27372-A

(Pages : 1 + 2 = 3)

Name.....

Reg. No.....

FIRST PROFESSIONAL M.B.B.S. DEGREE EXAMINATION, MAY/JUNE 2012

BIOCHEMISTRY—Paper II

(New Scheme)

Time : Three Hours

Maximum : 50 Marks

Answer Sections A and B in separate answer-books.

Answer all questions.

Draw diagrams wherever necessary.

MCQ's should be answered first in the response sheet provided.

Section A

- I. Multiple Choice Questions. Single response type-10, on separate sheets. (10 × ½ = 5 marks)
- II. Discuss in detail about absorption and transport of iron. Add a note on iron deficiency anemias. (7 + 3 = 10 marks)
- III. (a) Write the salient feature of genetic code.
- (b) Discuss the renal mechanism of regulation of blood pH. (2 × 5 = 10 marks)

Section B

IV. Write short notes on :

- (a) Rickets.
- (b) Mitochondrial DNA.
- (c) Post translational modifications.
- (d) Enzyme linked immuno-sorbant assay.
- (e) Regulation of gene expression by gene rearrangement.

(5 × 3 = 15 marks)

V. Write briefly on :

- (a) TATA box.
- (b) Folate trap.
- (c) Anti metabolites.
- (d) Lesch Nyhan syndrome.
- (e) Selenium containing enzymes.

(5 × 2 = 10 marks)

I. MULTIPLE CHOICE QUESTIONS

- Note.—(1) Do not write anything on the question paper.
(2) Write your register number on the answer-sheet provided.
(3) Select the **appropriate answer** and encircle the alphabet against each question number in the answer-sheet provided.
(4) In the answer-sheet enter the total number of your answers in the appropriate box provided.
(5) Each question carries $\frac{1}{2}$ mark.

- Sulphur containing B complex vitamin is :
 - Pyridoxine.
 - Thiamine
 - Niacin.
 - Riboflavin.
- Which one of the following is **not** related to p53 protein ?
 - Phospho protein.
 - Product of proto oncogene.
 - Half life is 5-10 minutes.
 - Gene is in chromosome No 17.
- Which one of the following is related to Z-DNA is ?
 - Right handed DNA.
 - Left handed DNA.
 - Circular DNA.
 - Biologically predominant DNA.
- First position nitrogen both in purine and pyrimidine are formed from :
 - Glutamic acid.
 - Aspartic acid.
 - Glutamine.
 - Glycine.
- Metabolic alkalosis occur in the following conditions **except** :
 - Renal failure.
 - Cushing syndrome.
 - Diuretic therapy.
 - Severe vomiting.
- Porphyria cutanea tarda is due to deficiency of the enzyme :
 - CPG oxidase.
 - Ferrochelatase.
 - UPG decarboxylase.
 - PBG deaminase.
- Non heme iron containing protein is :
 - Phenyl alanine hydroxylase.
 - Cytochrome C.
 - Catalase.
 - Nitric oxide synthase.