SS/MBBS/BIO-II/7-14

First Professional MBBS Examination

2014

(July)

BIOCHEMISTRY

Paper-II

Full Marks: 50

Time: 2 hours

The figures in the margin indicate

full marks for the questions

Write the answers to the two Halves in separate books

Answer all questions

FIRST HALF

1. What is the normal blood glucose level? How is blood glucose level maintained? (1+7=8)

2. Write in short on any three of the following :   [4 x 3 = 12]

(a) Lipotropic factors

(b) Phenylketonuria

(c) Isoenzymes in cardiac diseases

(d) Inhibitors and uncouplers in the electron transport chain

3. Justify the following statements : 1+1+1+2=5

(a) Blood glucose level may be normal in renal glycosuria.

(b) Tryptophan deficiency may cause pellagra.

(c) Methotrexate is used for treatment of cancer.

(d) Hypercholesterolemia occurs in diabetes mellitus.

SECOND HALF

4. Discuss about the DNA polymerases.   3

5. Write in short on any three of the following :   4×3=12

(a) PCR

(b) Mechanism of action of steroid hormone

(c) Telomerase

(d) Metabolism of HDL

6. A 4-year-old boy is having joint pain, aggressive behaviour, learning disability and urge to bite his own fingers and lips.

(a) Name the disorder and enzyme defects in this case. 1

(b) Draw the reaction catalyzer. 2

(c) What is normal blood uric acid level? Explain the cause of hyperuricaemia observed above. 2

★★★

14SM—800/29   SS/MBBS/BIO-II/7-14