

**The West Bengal University of Health Sciences**  
**MBBS 1st Professional (Supplementary) Examination 2014**

Subject : Biochemistry  
Paper : II

Full Marks : 50  
Time : 2½ hours

*Use Separate answer Script for each group*  
*Attempt all questions. The figures in the margin indicate full marks*

**Group – A**

1. a) Describe in detail how blood sugar level is maintained at a constant level in post absorptive State. Use a flow diagram. 12

or

- b) Discuss the dietary source, absorption in the gut, transport, storage in the tissues and utilization of iron in the body. 2+2+3+2+3

**Group – B**

2. Answer **any two** of the following :

2 x 7

- a) Give a brief account of different types of mutation with examples.  
b) Describe the role of glutathione, glucuronic acid and glutamine in the process of detoxification.  
c) Describe how one carbon compounds are utilized in the body mentioning the names of the donors and acceptors of those compound.

**Group – C**

3. Write short notes on **any four** of the following :

4 x 3

- a) Lecithin cholesterol acyl transferase.  
b) Protooncogenes.  
c) Cytochrome P450.  
d) DNA sequencing.  
e) Wald's visual cycle.

**Group – D**

4. Explain the following statements :

4 x 3

- a) Vitamin K takes part in the mechanism of blood coagulation;  
b) Replication fork is the main constituent for DNA replication;  
c) Glycosuria can happen even with the absence of hyperglycemia;  
d) Ketosis cannot lead to increased cholesterol synthesis.