

2016

M.Sc.

3rd Semester Examination

BIOMEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-303

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer Q. No. 1 and any three from the rest.

- 1. Answer any ten questions :** 10×1
- (a) Write the name of two sensors for assessment of cardiac function test.
- (b) Write any two features of primary standard.

(Turn Over)

- (c) What do you mean by discretionary test?
- (d) Write one significance of AST.
- (e) When arterial blood is collected for biochemical analysis?
- (f) What do you mean by maximum acid output (MAO)?
- (g) Write the name of two conditions when gastric HCl level decrease.
- (h) What is macroamylasemia?
- (i) Differentiate hepatic and jaundice.
- (j) What are the features of hypokalemic condition?
- (k) How do you prepare plasma from blood?
- (l) What is the clinical significance of glycated haemoglobin estimation?
- (m) What is c-peptide?
- (n) What is the impact of determination of albumin creatinine ratio?
- (o) What is the demerit of GOD-POD method for blood glucose measurement?

2. (a) What precautions are taken at the time of blood collection ?
- (b) Write the name of cardiac marker enzymes.
- (c) Discuss how cardiac marker levels are changed after myocardial infarction.

3+2+5

3. (a) Write the principle of determination of blood urea.
- (b) Write the clinical significance of blood urea.
- (c) How pentagastrin stimulation test is performed ?
- (d) Write the name of two disease conditions when pancreatic amylase level increase.

2+3+3+2

4. (a) Write the principle of determination of total protein.
- (b) State the clinical significance of serum triglyceride and serum creatinine.
- (c) Write procedure of determination of serum uric acid.

2+(2+2)+4

5. (a) What is meant by insulin sensitivity ?
- (b) What is the role of HOMA in the assessment of risk factor of metabolic disorder ?
- (c) What are the clinical significance of flame photometry in the field of Biomedical Laboratory Science ?

2+3+5

6. (a) Differentiate conjugated and unconjugated bilirubin from the biosynthetic aspect of bilirubin formation.
- (b) Discuss about different types of unconjugated and conjugated hyper-bilirubinemia with its biochemical features.

5+5
