

**M.Sc.**

**2017**

**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 question No.1 and any three from the rest.

1. Answer any ten questions of the following : 10×1

- (a) Write one clinical significance of acid phosphatase estimation.
- (b) Write name of two sensors for assessment of cardiac function test.

*(Turn Over)*

- (c) What do you mean by end point of titration ?
- (d) What do you mean by redox titration ?
- (e) Which anticoagulant is generally used for the estimation of blood glucose level ?
- (f) Write any two applications of flame photometry.
- (g) What do you mean by monochromator ?
- (h) Write any two conditions when serum amylase levels are increased.
- (i) Write the normal range of blood creatinine level in male adult.
- (j) What do you mean by maximum acid output (MAO) ?
- (k) Write any one light source of UV spectrophotometer.
- (l) Write any two conditions when gastric HCl level is decreased.
- (m) State the name of one hormone that stimulates gastric HCl secretion.
- (n) Which colour flame do you find for potassium in flame photometry ?

- (o) Write one significance of SGOT as pay.
2. (a) What do you mean between dicretionary test and ON / OFF test performed in the biochemical laboratory ?
- (b) Write the different steps of veinpuncture technique.
- (c) What are the different common errors occur in biochemical laboratory ? 3+4+3
3. (a) Write the principle of blood creatinine level assessment by alkaline picrate method.
- (b) Why creatinine level is better marker for renal function test ?
- (c) Write the procedure of defermination of serum creatinin level.
- (d) What are the clinical significance of blood bilirubin level ? 2+2+4+2
4. (a) How will you prepare protein-free blood ?
- (b) Write the aspesment of salicylate toxicity in blood.
- (c) What are the clinical significance of blood glucose level ?

5. (a) What are the different components of spectrophotometer ?
- (b) How photomultiplier tube works in spectrophotometer ?
- (c) What do you mean by double beam and single beam spectrophotometer.
- (d) What are the advantages of double beam spectrophotometer over single beam type. 2+2+3+3
6. (a) Write the name of two markers of pancreatic function test.
- (b) Write about any two test meal in gastric function test.
- (c) What are the different components of flame photometry. 2+(2½+2½)+3
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