

2016

M.Sc.

1st Semester Examination

BIO-MEDICAL LABORATORY SCIENCE & MANAGEMENT

PAPER—BLM-104

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 questions of the following.

1. Answer any ten of the followings : 10×1

- (a) What do you mean by intra assay variation?
- (b) Define sensitivity of hormone assay.
- (c) Write the mode of action of Clomiphene.

(Turn Over)

- (d) Write the shape of s-ELISA graph.
- (e) What do you mean by solid-phase immuno assay ?
- (f) Write the names of any two tracer molecules used for labelling purpose in RIA.
- (g) Why Plasma Insulin is not valid assay technique for assessment of Pancreatic status ?
- (h) What do you mean by Primary hypothyroidism ?
- (i) What do you mean by GDM ?
- (j) What is mitochondrial D.M. ?
- (k) Write the full form of PCOS.
- (l) What do you mean by temporary endocrine gland.
- (m) Define primary hypogonadism.
- (n) Write the names of any two hormones involved in thyroid hormone synthesis.
- (o) Write the full form of MIT.

2. (a) Classify ELISA on the basis of labelling of antibody.
- (b) Write the protocol of s-ELISA for any one hormone assessment.
- (c) Write the advantages of ELISA over RIA.

3+4+3

3. (a) Write the changes in thyroid profile of primary and secondary hyperthyroidism patients.
- (b) Write the different types of feedback action of Pituitary-thyroid axis.
- (c) State the mode of action of Goitrogen in general.

4+4+2

4. (a) Write the causes of diabetes mellitus type-2.
- (b) Why hypo testicular activity is noted in diabetes mellitus ?
- (c) 'Obesity results male hypogonadism' — Justify the statement.

3+4+3

5. (a) How is radiolabelling of hormones different from antibody coating?
- (b) What is Chemoluminance?
- (c) State the principles of fluorescence immunoassay (FIA). What are its advantages of RIA?

3+4+3

6. (a) Write the major causes of primary hypogonadism.
- (b) State the protocol of Clomiphene citrate test for evaluation of Pituitary-ovarian axis.
- (c) Write the role of thyroid on testicular activity.

3+4+3