2015

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) Write the name of any one enzyme used in labelling purpose of antibody in ELISA.

(b) Write the full form of IRMA.

(c) What do you mean by primary antibody?

(d) Write the name of the device used for radioactivity assessment of hormone tagged with 131_I.

(e) What is cranial diabetes insepidus?

(f) Write the example of one fluorescence molecule used in FIA.

(g) What do you mean cross metaling?

(h) Define infertility.

(i) What do you mean by teratospermia?

(j) What do you mean by sensitivity of hormone assay technique?

(k) Write the arrangement of antigen and antibody layers in SELISA.

(l) What is leptin?

(m) Write the full form of DIT.

(n) What changes are noted in plasma about thyroid hormones in primary hypothyroidism?

(o) What do you mean by HbA_{1C}?

2. (a) Why s-ELISA is preferred over c-ELISA?

(b) Write the sensors for the selection of high quality ELISA kit.

(c) What do you mean by standard curve? Write the steps for the construction of standard curve in ELISA.

2+3+(2+3)

3. (a) What do you mean by pituitary-adrenocortical axis feedback system?

(b) Describe the dynamic test on pituitary-ovarian activity.

(c) What is adrenogenital syndrome?

3+5+2

4. (a) What do you mean by hypophysial hypogonadism?

(b) Write any two causes of hypogonadism due to diabetes mellitus.

(c) 'High level of ACTH results hypogonadism' — justify the statement.

3+4+3

5. (a) Write the steps of oestradiol hormone assay by ELISA technique.

(b) Why RIA is not adopted as preferred technique for hormone assay?

(c) Write the steps of antibody coating of microwells.

5+3+2

6. (a) Why plasma glucose assessment is not an important sensor for the diagnosis of diabetes?

(b) Why ketosis is noted in diabetes?

(c) Why plasma c-peptide is an important sensor than plasma insulin assay for diagnosis of diabetes?

3+3+4
