2017

M. Sc.

1st Semester Examination

BIO-MEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER-BLM-104

Subject Code-22

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 of the following.

- 1. Answer any ten questions of the following: 10×1
 - (a) What is cross reaction?
 - (b) Write the main cause of D.M. type-2.

- (c) What is the relationship between OD and hormone concentration in s-ELISA?
- (d) Write the thyroid profile in primary hyperthyroidism.
- (e) Write the marker molecules used in FIA and CLIA for labelling purpose.
- (f) What hormone is synthesized and secreted from adipose tissue?
- (g) What is the source of Insulinase in our body?
- (h) Which counter you will use when antigen molecules are labelled with C¹⁴?
- (i) Write the full form of DIT.
- (j) What do you mean by autoimmune diabetes?
- (k) Which hormone is mainly responsible for ovulation?
- (l) What do you mean by teratorpermia?
- (m) Which enzyme is mainly used for labelling purpose for antigen molecule in ELISA?
- (n) What do you mean by cranisal diabetes mellitus?
- (o) Define infertility.

- 2. (a) What do you mean by solid and liquid Phase ELISA?
 - (b) Why ELISA is preferred over RIA?
 - (c) Write the protocol of C-ELISA for the assessment of any one hormone.

 3+3+4
- 3. (a) Why plasma glucose level is not consider as sensitive indicator for the diagnosis of diabates mellitus?
 - (b) How will you acess the β -Cell status of Isletes?
 - (c) Why female fertility is interfered by obese conditon?
 - (d) What is primary hypogonadism? 3+2+3+2
- 4. (a) Define primary hypothyroidism.
 - (b) Write the status of pituitary-thyroidal axis in Goitre state.
 - (c) Write the mechanism of action of thiocyanate for induction of goitre. 2+4+4
- 5. (a) Define interassay and intraassay variations.
 - (b) Why is hypogonadism noted in hyperadrenal condition?

- (c) Write any two major causes of female infertility.
- (d) What do you mean by antisperm antibody?

 3+3+2+2
- 6. (a) What do you mean by hot and cold antigens?
 - (b) Write the protocol of radiolabelling of hormone.
 - (c) Write the principle of scintillation counter.
 - (d) State the nature of standard curve of e-ELISA and s-ELISA. 2+3+3+2