PG/IS/BML/104/24

PG 1st Semester Examination, 2024

BIO-MEDICAL LABORATORY SCIENCE & MANAGEMENT

(*Clinical Endocrinology*)

PAPER — BML-104

Full Marks : 50

Time : 2 hours

Answer **all** questions

The figures in the right hand margin indicate marks

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

GROUP — A

Answer any **four** questions of the following :

2 × 4

1. What are monoclonal and polyclonal antibodies ?

2. What do you mean by hot and cold antigens ?

3. Why s-ELISA is preferred over c-ELISA ?

4. Why is glycated hemoglobin (HbA1c) test is referred ?

5. Define primary and secondary hyperthyroidism.

6. What is cross reaction in hormone assay ?

GROUP – B

Answer any **four** questions of the following :

4×4

7. Write the co-morbidies of diabetes.

8. Write the difference between strip and plate ELISA.

9. Classify immunoassay on the basis of labelling of antigen.

(*Continued*)

10. State the programme for hormone assay using ELISA reader in general.

11. Why ELISA is preferred over RIA ?

12. What is thyroid profile ? Write the cause of goiter.

GROUP – C

Answer any **two** questions of the following : 8×2

13. Why is hypothalamus called a master gland ? Discuss the function of this gland. Which factors affect the functions of this gland?

$2 + 4 + 2$

14. Write the steps involved for the assessment of thyroxine using s-ELISA. State difference of graphics between s-ELISA and c-ELISA.

$5 + 3$

15. What are the pre-conditions used for fasting glucose assessment in relation with diagnosis of diabetes ?

(Turn Over)

'Plasma insulin is not considered as β-cell status marker but C-peptide level in plasma is sensitive sensor for this purpose' – Explain.

4 + 4

16. Write the causative factors of IDDM and NIDDM. State the factors affecting hormone immunoassay.

4 + 4

[Internal Assessment — 10 Marks]