

M.Sc. 1st Semester Examination, 2023

**BIOMEDICAL LABORATORY SCIENCE
AND MANAGEMENT**

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** of the following : 2×4

1. What do you mean by hot antigen and cold antigen in RIA ?

2. Write the basis of 'Hashimoto Disease'.
3. What do you mean by Chemoluminance ?
4. Write the name of any two fluorescent molecules.
5. Write the name any two enzymes used for labelling, purpose of hormone.
6. Write the principle of cross reaction in hormone assay.

GROUP - B

Answer any **four** of the following questions :
4 × 4

7. State the feed forward and feedback systems operating in endocrine system in general.
8. Write the steps of antibody counting of ELISA microwells.

9. Describe any four parameters for quality assessment in ELISA.
10. Discuss the working principle of FIA.
11. State the abnormalities noted in hyper and hypothyroidism.
12. What are complications due to primary and secondary hypogonadism ?

GROUP - C

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

13. Describe the steps of insulin assay in plasma using ELISA reader.
14. Discuss the steps adopted for drawing the standard curve in ELISA with an example.
15. Describe the hormone assay following RIA technique.

16. Discuss the steps adopted in CLIA. What are the advantages of CLIA over FIA. 6 + 2

[Internal Assessment – 10 Marks]
