

M. Sc. 4th Semester Examination, 2025

BIO-MEDICAL LABORATORY SCIENCE

AND MANAGEMENT

PAPER – BML-403

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 : 2 × 4

- 1. In which condition oval fat body is visible in urine sample ?**
- 2. Name different methods of specific gravity measurement.**

(Turn Over)

3. Differentiate cystitis and pyelonephritis.
4. Why vegetable rich diet oriented stool is acidic but protein rich diet oriented stool shows alkalinity ?
5. Name smallest amoeba and define its identifying character in stool.
6. What is the clinical significance of hyaluronic acid for joints ?

GROUP—B

Answer any **four** questions : 4 × 4

7. Differentiate hyaline cast and granular casts.
When epithelial cells are visible in urine sample excess in number ? 2 + 2
8. What is Bence Jones protein ? State its clinical significance. 2 + 2

9. Write the principle of determination of specific gravity by refractometry. 4
10. What are STRs and VNTRs ? How these are useful in DNA fingerprinting ? (1 + 1) + 2
11. Give a brief clinical significance on different stool colour.
12. Name the stool pathogens (ova/parasite) and state microscopic examination features of stool with give diagram. 2 + 2

GROUP – C

Answer any two questions : 8 × 2

13. Define steatorrhea. Write a short note on laboratory diagnosis of Giardiasis. 2 + 6
14. What is ACR ? Classify proteinuria. How do you detect ACR and interpret your result on the basis of ACR value chart ? 2 + 2 + 4

(4)

15. Discuss about different types of urinary crystal with its clinical significance. 8

16. Write short notes on : 3 + 3 + 2

(a) Mucin clot test interpretation

(b) Features of CSF in viral and bacterial meningitis

(c) Transudate.

[Internal Assessment — 10 Marks]