

M.Sc. 3rd Semester Examination, 2022
BIOMEDICAL LABORATORY SCIENCE &
MANAGEMENT

PAPER – BML-302

Full Marks : 40

Time : 2 hours

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. Define 'Infiltration and Impregnation' in tissue processing.
2. Write the composition of BOUIN's fixative.
3. How will you prepare 100 ml of 70% alcohol from 90% and 60% alcohol ?

4. Define intermediate host.
5. Why are you use only periodic acid as oxidative agent in PAS reaction ?
6. What is gravid proglottid ?

GROUP – B

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

7. State the objectives of fixation in tissue processing.
8. Write the clinical features of hookworm infection.
What is ectoparasite ? $3 + 1$
9. Discuss the normoberic and hypoberic phases of paraffin impregnation in tissue sample for embedding.
10. State steps adopted in marker detection for disease diagnosis by ABC technique in immunohistochemistry.

11. State differences between FIHC and EIHC. Which one out of above two will you prefer and why? $2 + (1 + 1)$
12. Discuss the life cycle of 'Toxoplasma gondii'. 4

GROUP – C

Answer any two questions : 8×2

13. (a) Write the steps of hematoxyline stain preparation in your laboratory.
- (b) State the steps of PAS reaction for detection of PAS positive material in tissue sample. $4 + 4$
14. (a) Write the components of PAP complex.
- (b) State the steps for disease marker detection by PAP immunohistochemistry.
- (c) Why is marker diagnosis preferred over histological diagnosis in clinical field. $2 + 4 + 2$

15. (a) Write the name of one filarial worm.

(b) Discuss the life cycle of it.

(c) Write the Mc Master parasite egg counting technique. 1 + 4 + 3

16. (a) Write the name of any one blood fluke.

(b) Discuss the life cycle and pathological symptoms of blood fluke. 1 + (4 + 3)
