

2022

1st Semester Examination

**BIOMEDICAL LABORATORY
SCIENCE AND MANAGEMENT**

Paper : BMLSM 102

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full 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=8

1. Define plagiarism.
2. Write the objective of 'Basic Research'.
3. What do you mean by primary data ?
4. What do you mean by 'Statistics of dispersion' ?
5. Define zero correlation with example.
6. When 'Yate's correction' is needed ?

P.T.O.

Group - B

Answer any *four* of the following : $4 \times 4 = 16$

7. "Legal issues and ethical issues are not running parallel in every time" — Justify with example. What is IPR ? 2+2
8. What is 'PERT' chart? Justify the importance of this chart. 2+2
9. What do you mean by impact factor of a journal and citation index of a research paper ? 2+2
10. Compute the mode of the frequency distribution of blood pressure (mm of Hg). 4

Class interval	frequency
115-118	3
119-122	6
123-126	9
127-130	7
131-134	5

11. Determine whether there is any significant association present or not between diabetic status and hypertensive status using the following data. 4

	Hypertensive	Normotensive
Diabetic	30	10
Non diabetic	5	25

$$\chi^2_{0.05}(1) = 3.84, \quad \chi^2_{0.01}(1) = 6.64$$

12. Find out whether blood cholesterol level (mg/dl) has any significant difference in between groups before and after 'Statin' treatment. 4

<u>Blood Cholesterol</u> (mg/dl) Before statin treatment	<u>Blood Cholesterol</u> (mg/dl) After statin treatment
180	160
220	180
240	170
200	150
210	160
230	170

two tail

$$t_{0.05(5)} = 2.015$$

$$t_{0.01(5)} = 4.032$$

Group - C

Answer any *two* of the following : 8×2=16

13. Write the different steps of project proposal formulation in brief. 8
14. Compute the r_p between body weight and haemoglobin levels of 10 adult women using the following data and interpret your results. 6+2

Woman	:	1	2	3	4	5	6	7	8	9	10
Body Wt (kg)	:	45	48	60	42	53	62	48	46	52	40
Haemoglobin g/dl	:	9	8	13	7	10	12	9	10	11	6

Two tail $t_{0.05(8)} = 2.262$, $t_{0.01(8)} = 3.350$

P.T.O.

15. Describe about quantitative research. Why experimental research is both qualitative and quantitative? 4+4
16. Write the features of normal distribution. Give a brief description about skewness. 4+4
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