

M.Sc.

2016

2nd Semester Examination

BIOMEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-204

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

Answer question no. 1 and any three of the following.

1. Answer any ten questions of the following : 10×1
 - (a) What do you mean by non-parametric statistics ?
 - (b) What is the difference between gigabyte and terabyte ?
 - (c) What do you mean by negative correlation ?
 - (d) What is EPROM ?

(Turn Over)

- (e) What do you mean by independent Variable ?
- (f) Write any one application of 't-test' using population mean.
- (g) What do you mean by normal solution ?
- (h) What is RAM ?
- (i) What do you mean by computer programming ?
- (j) RBC count is 5.4 billion/cu mm of blood. What would be the count in liter of blood ?
- (k) What is literature review ?
- (l) Write the formula for SE computation from S.D. in small sample.
- (m) What do you mean by 'df' ?
- (n) What do you mean by 'Action Research' ?
- (o) Three equal data having rank value 6, 7, 8. What would be the common rank value of these data ?

2. Fasting blood glucose level of 9 diabetic patients before and after, medicine application given below. Find out whether there is any antidiabetic effect of that medicine in significant level :

Patients. :	1.	2.	3.	4.	5.	6.	7.	8.	9.
Before Medicine : Treatment, (Blood glucose Level mg/dl)	170	190	165	185	182	155	160	171	176
After Medicine : treatment.	155	145	132	144	153	122	145	150	155

Critical Values of t : One tail : $0.05(8) = 1.860$

$0.01(8) = 2.896$

two tail : $0.05(8) = 2.306$

$0.01(8) = 3.355$ 10

3. Compute r_p between blood cholesterol and blood glucose levels of 10 hyperglycaemic patient using the following data :

Patients. :	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Blood Cholesterol : level (mg/dl)	170	185	165	180	176	192	190	185	189	200
Blood glucose : Level (mg/dl)	165	160	162	155	158	190	190	170	168	185

Find out whether there is a significant correlation between the Variables.

two tail $t_{0.05(8)} = 2.306$

$t_{0.01(8)} = 3.355$

$t_{0.001(8)} = 5.041$

6+4

4. (a) Write the importance of pilot project in conduction of major research Project.
- (b) State the importance of time budgeting in research project.
- (c) Write the criteria of good method adopted in conduction of research. 4+3+3
5. (a) Define volatile memory.
- (b) How do compiler and interpreter works ?
- (c) Give the block diagram of computer architecture. 2+4+4
6. (a) Differentiate system software and application software.
- (b) How do you edit a picture using any Software ?
- (c) How do you calculate mean and SD using X-Cell ? 4+3+3
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