

M.Sc. 2nd Semester Examination, 2013

**BIO-MEDICAL LABORATORY SCIENCE
AND MANAGEMENT**

PAPER—BMLSM - 202(Unit - 12)

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*

Illustrate the answers wherever necessary

MODULE – I

1. Answer any five of the following : 1 × 5

(a) Write the formula for the preparation of specific strength of acid from a known strength of acid.

(b) What do you mean by non-parametric statistics ?

(Turn Over)

- (c) What do you mean by H_0 ?
- (d) What do you mean by positive co-relation ?
- (e) What do you mean by normality ?
- (f) Write the formula of S.E from group data.
- (g) Find H^+ conc \bar{c} of 0.5 N H_2SO_4 .

2. (a) What do you mean by dependent and independent variable ?
- (b) What do you mean by one way ANOVA ? Give example.
- (c) What do you mean by 2×2 fold contingency table ? Give an example.
- (d) Write the assumption of chi-square test.

$$2 + (1 + 1) + (1 + 1) + 2$$

Or

- (a) What do you mean by one tail and two tail 't' test ?

(b) How you prepare 500 ml of 0.8(m) NaCl solution ?

(c) What will be the concentration resulting from mixing 30 ml of 10 % NaCl with 20 ml of 5 % NaCl solution ?

(d) How will you prepare 90 % alcohol by mixing absolute alcohol and 70 % alcohol ?
2 + 2 + 2 + 2

3. Find out whether or not there is a significance difference of plasma protein of the two groups :

Group I : 5, 6, 4, 6, 7, 8, 5, 7,

Group II : 8 7 8 6 7 6 7 8

$$\text{Critical } t_{0.05}(8) = 2.305$$

$$t_{0.05}(7) = 2.365$$

$$t_{0.05}(14) = 1.932$$

$$t_{0.05}(16) = 1.852$$

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Or

(a) The specific gravity of HNO_3 is 1.62 and assay purity is 70 %. What do you mean by this. What is the amount of HNO_3 in 1 ml.

- (b) A plasma sample is diluted $1/2$ at first followed by $1/3$ and then $1/3$. Calculate the conc̄ of last two diluted sample. $(2 + 2) + 3$

MODULE – II

1. Answer any *five* of the following : 1×5
- (a) What is megabyte ?
 - (b) Write the full form of ROM.
 - (c) Give an example of primary memory.
 - (d) Write the full form of CPU.
 - (e) What is computer virus ?
 - (f) What is multi user operating system ?
 - (g) What is CPU ?
 - (h) Who invented computer ?
5. (a) What do you mean by computer memory ?
- (b) How they can be classified ?
 - (c) Write their functions. $2 + 3 + 3$.

(5)

Or

- (a) What is operating system ?
- (b) What are the functions of operating system ?
- (c) Why CPU is an important part of computer system ? 2 + 4 + 2

6. (a) Write the different parts of a computer and describe their functions.
- (b) Write the different purposes when MS Word, MS Excel and MS Power Point. 4 + 3

Or

- (a) How will you put a picture in MS Word document ?
- (b) Describe stepwise how will you prepare MS Power Point to submit data in a representable manner.
- (c) Give two examples of internet browser system. 2 + 3 + 2