I B. Pharmacy II Semester Regular Examinations, April/May - 2017 COMPUTER APPLICATIONS AND BIOSTATISTICS
Time: 3 hours
Note: 1. Question Paper consists of two parts (Part-A and Part-B)
2. Answering the question in Part-A is Compulsory
3. Answer any FOUR Questions from Part-B

## PART - A

1. a) Write keyboard shortcuts for Bold, Italics, underline and Print in MS WORD.
b) What is a search engine? List some popular search engines.
c) Define an operating system.
d) Mention the methods of collecting primary data.
e) Find the probable error, for the number of students is 25 with their rank correlation is 0.7 .
f) Write the conditions for applying chi-square test.
g) Calculate the coefficient of range for the following data. (10,20,30,40,50,60,70,80)

## PART - B

2. a) Draw the block diagram of acomputer. Explain the basic components of a computer.
b) What are different charts and graphs available in MS Office applications? Explain the use of each type of chart with an example.
3. a) Explain about the structure and organization of the world wide web.
b) Write a detailed note on Hypertext Markup Language.
4. a) What are the advantages and disadvantages of database systems over traditional file systems?
b) Explain how computers can be used in pharmaceutical industries.
5. a) Calculate the standard deviation of the following data:

| $x$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ | 43 | 48 | 65 | 57 | 31 | 60 | 37 | 48 | 78 | 58 |

b) Calculate Mean, Median mode of the following data:

| x | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 19.5 | 20.5 | 21.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| y | 35 | 40 | 48 | 100 | 125 | 87 | 43 | 22 |

6. a) Find the coefficient of correlation for the following data:

| $x$ | 6 | 2 | 10 | 4 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ | 9 | 11 | 5 | 8 | 7 |

b) Find the two regression lines from the following data:

| x | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| y | 2 | 3 | 5 | 4 | 6 |

7. a) A random sample 10 drugs is given as follows: $70,120,110,101,88,83,95,98$, 107,100 . Do these data support the assumption of population drugs mean is 100 . Test at $5 \%$ level of significance.
b) On the basis of information given below about the treatment of 200 patients suffering from Cancer, state whether the new treatment is comparatively superior to the conventional treatment.

|  | Favourable | Not favourable | Total |
| :--- | :--- | :--- | :--- |
| New | 60 | 30 | 90 |
| Conventional | 40 | 70 | 110 |

