## FIRST B.PHARM. DEGREE EXAMINATION.

(Regulations 2009)
Candidates Admitted from 2009-10
Paper V - BIOSTATISTICS AND COMPUTER APPLICATION
Q. P. Code : 564255

Time : Three hours
Maximum : 80 marks

## SECTION A

(BIOSTATISTICS)
I. Essay Questions : Answer any ONE questions. (1 x $20=20)$

1. Write various types of sampling and discuss the methods of probability sampling.
2. Calculate the Regression Equations for the following data

| $\mathrm{X}:$ | 2 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| $\mathrm{Y}:$ | 10 | 11 | 12 | 13 | 14 | 15 | 20 | 18 | 22 | 25 |

II. Write short notes : Answer any THREE questions.
( $3 \times 5=15$ )

1. Discuss about Bar chart and Pie diagram.
2. Calculate the Mean, Median, Mode
$45,55,58,62,65,68,69,70,73,74,77,79,74,81,74,83,89,93,96,99$.
3. Calculate the Standard Deviation and Co-efficient of Variation.

25, 28, 30, 27, 25.
4. Write short notes on null hypothesis and alternative hypothesis.
5. A bag contains 7 white, 6 red and 5 black balls. Two balls are drawn at random. Find the probability that both will be red.

## III. Short answers : Answer any TWO questions.

1. Define Probability.
2. What is positive Correlation and Negative Correlation?
3. What is the meaning of an Ogive graph?

## SECTION B

## COMPUTER APPLICATION

## I. Essay Questions : Answer any ONE questions.

1. Discuss the computer memories and secondary storage devices.
2. (a) Discuss the types of operators available in C language.
(b) Explain the for loop with an example.
II. Write short notes : Answer any THREE questions.
( $3 \times 5=15$ )
3. Define multimedia. Outline same of its applications.
4. Write short notes on Internet and its uses.
5. Write a note on MS-Excel and MS-PowerPoint.
6. Outline the constants and variables available in C .
7. Discuss the functions of central processing unit.

## III. Short answers : Answer any TWO questions.

1. Modem.
2. Flow chart.
3. HTTP.

## FIRST B.PHARM. EXAMINATION

## Paper V - BIOSTATISTICS AND COMPUTER APPLICATION

Q.P. Code : 564255

Time : Three hours
Maximum : 100 marks
Answer Section A and B in SEPARATE Answer Book.

## SECTION A - BIOSTATISTICS

## I. Long Essay:

$(1 \times 20=20)$

1. Explain the various methods of collecting primary data pointing out their merits and demerits
II. Short Notes :
$(4 \times 5=20)$
2. From the following data obtained the regression equation of $x$ on $y$

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

2. Name the different types of bar diagrams and explain any one of them.
3. Write a short note on stratified random sampling.
4. Find the mean deviation for the following data

| $x$ | 2 | 4 | 6 | 8 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $f$ | 1 | 4 | 6 | 4 | 1 |

## III. Short Answers

1. Histogram.
2. Define median.
3. What is scatter diagram?
4. Level of significance.
5. Define probability.

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## SECTION B COMPUTER APPLICATION

## I. Long Essay:

$(1 \times 20=20)$

1. Explain the various graphic display devices.

## II. Short Notes :

( $4 \times 5=20$ )

1. What are the Characteristics of a computer?
2. Give a brief note on two commonly used storage devices.
3. Write a note on internet and its uses.
4. Explain URL.

## III. Short Answers

1. Difference between RAM and ROM.
2. LAN.
3. What are arrays in ' C ' language?
4. Output Devices.
5. List out the string handling functions used in ' C '.

# FIRST YEAR B.PHARM. EXAM <br> Paper V - BIOSTATISTICS AND COMPUTER APPLICATION 

Q.P. Code: 564255

Time: Three hours
Maximum : 100 marks
( 180 Min ) Answer ALL questions in the same order.
Answer Section A and Section B SEPARATELY
SECTION A
(BIOSTATISTICS)

## I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

1. 10 cometitors are ranked by 3 Judges

| Judges | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | 6 | 5 | 3 | 10 | 2 | 4 | 9 | 7 | 8 | 1 |
| B | 5 | 8 | 4 | 7 | 10 | 2 | 1 | 6 | 9 | 3 |
| C | 4 | 9 | 8 | 1 | 2 | 3 | 10 | 5 | 7 | 6 |

Discuss which pair of Judges has the nearest approach of testes of beauty.
$19 \quad 33 \quad 20$

## II. Short Notes:

1. Calculate Arithmetic mean for the following data (Discrite series) Direct methods. 308

| Mark: | 60 | 55 | 40 | 45 | 62 | 67 | 69 | 70 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Students: | 3 | 7 | 5 | 10 | 7 | 9 | 8 | 11 |

2. A Bag contain 5 Red and 7Grean balls which is Probability.
3. Discuss above the random sampling.
$3 \quad 8 \quad 5$
4. Discuss above Multiple Bar Diagram \& Percentage Bar Diagram.

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## III. Short Answers:

1. Define Graph. $1 \begin{array}{lll}2\end{array}$
2. Define Statistics. $1 \begin{array}{lll}1 & 5 & 2\end{array}$
3. Define Probablity. $1 \begin{array}{lll}1 & 5 & 2\end{array}$
4. Types of Errors. $1 \begin{array}{lll}5 & 2\end{array}$
5. Explain the Mode. $1 \begin{array}{lll}1 & 5\end{array}$

## SECTION B (COMPUTER APPLICATION)

## I. Elaborate on:

1. Explain the Importance of M.S.WORD, M.SEXCELL,
M.S.POWER POINT menus.

## II. Write notes on:

1. Briefly explain the types of network. 3085
2. Briefly explain about memory and Secondary storage
devices.
3. Explain the Main frame computer \& Micro computer. 3
4. Briefly explain the Mailmerge concepts. 308

## III. Short Answers:

1. List out any four types of Printers. $1 \begin{array}{lll}2\end{array}$
2. List out any four windows components. $1 \begin{array}{lll}2\end{array}$
3. Give the purpose of CD-Rom. $1 \begin{array}{lll}5 & 2\end{array}$
4. List out the applications of E-mail. 1105
5. What is Web Browser. $1 \begin{array}{lll}2\end{array}$

# FIRST YEAR B.PHARM. EXAM <br> Paper V - BIOSTATISTICS AND COMPUTER APPLICATION 

Time : Three hours
Maximum : 100 marks (180 Min)

## Answer Section A and Section B SEPARATELY <br> SECTION A <br> (BIOSTATISTICS)

## I. Elaborate on:

$(1 \times 20=20)$


| X | $50-53$ | $53-56$ | $56-59$ | $59-62$ | $62-65$ | $65-68$ | $68-71$ | $71-74$ | $74-77$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 3 | 8 | 14 | 30 | 36 | 28 | 16 | 10 | 5 |

II. Write notes on:
(4X5=20)

1. Distinguish between correlation and regression.
2. Write short notes on a) frequency polygon b) histogram.
3. The probability that A can solve a problem in Biostatistics is $4 / 5$, that B can solve it is $2 / 3$ and C can solve it is $3 / 7$. If all of them try independently, find the probability that the problem will be solved.
4. What is the scope of statistics in pharmaceutical research?

## III. Short Answers:

1. Mention the different types of classification of data.
2. Define Statistics.
3. What is the probability of getting a head in tossing a coin?
4. Range as a measure of dispersion.
5. Type I and Type II errors.

## SECTION B <br> (COMPUTER APPLICATIONS)

## I. Elaborate on:

$(1 \times 20=20)$

1. What are arrays? Explain the different type of arrays with examples.

## II. Write notes on:

(4X5=20)

1. Explain briefly various types of memory.
2. Write the main functions of the central processing unit.
3. What is an input device? Mention some input devices.
4. Write a note on WAN.
III. Short Answers:
5. Define flow chart.
6. Uses of MS excel.
7. Write a note on RAM.
8. Modem.
9. HTTP.

Time : Three hours
Maximum : 100 marks
Answer Section A and B in SEPARATE Answer Book.
SECTION - A
(BIOSTATISTICS)
I. Elaborate on:
(1X20=20)

1. Twelve students were given intensive coaching and two tests were conducted in a month. Does the Scores from test 1 to 2 show an improvement? The scores of the tests are given below:
Marks in I test : $5042512635426041 \quad 70556238$ Marks in II test: $6240613530526851 \quad 84637250$ ( $\mathrm{t}_{0.05}$ for $11 \mathrm{DF}=2.20$ )
II. Write notes on:
(4X5=20)
2. Find the Mean deviation about mean is 7 for the following data
$\begin{array}{llllll}\mathrm{X}: 15 & 10 & 7 & 5 & 3 & 2\end{array}$
3. Write Scope of statistical methods in Pharmacy
4. Write Characteristics of normal distribution
5. What are requisites of good Average?
III. Short Answers:
6. Probability
7. Histogram
8. Primary data
9. Types of Errors
10. Systematic Sampling.

> SECTION - B
> (COMPUTER APPLICATION)

## I. Elaborate on:

$(1 \times 20=20)$

1. Explain about the Library functions used in C program and give examples.
II. Write notes on:
$(4 X 5=20)$
2. Define operating system. What are types of Operating system
3. Explain memories used in operating system
4. What are the significance of MS-Excel and explain briefly
5. Define network and explain all types of Network.
III. Short Answers:
6. Search engine
7. Mail merge
8. FTP
9. MS-DOS
10. Word pad.

Time : Three hours
Maximum : 100 marks
Answer Section A and B in SEPARATE Answer Book.
SECTION - A
(BIOSTATISTICS)

## I. Elaborate on:

(1X20=20)

1. The table given below shows the data obtained during an epidemic of cholera

|  | ATTACKED | NOT ATTACKED | TOTAL |
| :---: | :---: | :---: | :---: |
| INOCULATED | 620 | 380 | 1000 |
| NOT | 550 | 450 | 1000 |
| INOCULATED |  |  |  |
| TOTAL | 1170 | 830 | 2000 |

Test the effectiveness of inoculation in preventing the attack of cholera.
(Hint: The table value of $x^{2}$ for 1 degree of freedom at $5 \%$ level of significance is 3.841)
II. Write notes on:
(4X5=20)

1. Define primary data. Discuss any two methods of collecting primary data pointing out their merits and demerits.
2. Write short notes on a) Histogram b) Pie diagram
3. A bag contains 7 green, 5 white and 3 red balls. If 3 balls are drawn at random, determine the probability that (a) all 3 are white (b) at least 1 is green.
4. What is Lorenz Curve? How is it drawn? In what way does it help in studying variation of two or more distributions?
III. Short Answers:
5. Calculate Median and Mode for the following set of observations:

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11,10,12,9,12,10,14,12,9
$$

2. Define regression.
3. Define Standard deviation.
4. Define Harmonic Mean.
5. Define Sampling and Non Sampling errors.

> SECTION - B
> (COMPUTER APPLICATION)

## I. Elaborate on:

(1X20=20)

1. Explain the various graphical input and output devices

## II. Write notes on:

(4X5=20)

1. Explain the basic components of computer and their functions.
2. Write notes on Internet and its uses
3. Discuss any three pharmaceutical applications of computer.
4. Explain arrays with its types

## III. Short Answers:

1. List out the operating system functions
2. What are the differences between desktop computer and laptop computer?
3. What are C tokens?
4. How do you format text in MS Word
5. What are the differences between LCD monitor and CRT monitor

# FIRST YEAR B.PHARM. EXAM <br> PAPER V - BIOSTATISTICS AND COMPUTER APPLICATIONS 

Q.P. Code : 564255

Time: Three hours
Maximum: 100 marks
Answer Section A and B in SEPARATE Answer Book.
SECTION - A
(BIOSTATISTICS)
I. Essay:
$(1 \times 20=20)$

1. Briefly discuss on the Sampling methods.
II. Short Notes:
$(4 X 5=20)$
2. Write about the characteristics of statistic.
3. Distinguish between correlation and regression.
4. Calculate Standard Deviation for the following data: 30,43,45,55,68,69,75.
5. Two dice are thrown, What is the probability of getting:
a) Total of 8 .
b) Total of 11 .
c) Multiples of 5 .
III. Short Answers:
6. Define sample
7. Probability
8. Scatter diagram
9. Define Range
10. Define Median

> SECTION - B
> (COMPUTER APPLICATION)
I. Essay:

1. Discuss briefly on the internal organization of a digital computer.
II. Short Notes:
2. Give the characteristic features of a computer
3. Write about printer and its types
4. Discuss on the functions of operating system
5. Write about MS Word

## III. Short Answers:

1. Define types of computers
2. Define Header and Footer
3. Define secondary memory
4. Define algorithm
5. Define network and its types
