[KY 761]   **Sub. Code : 4255**

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

X :	2	2	3	4	4	5	6	7	8	9
Y :	10	11	12	13	14	15	20	18	22	25

II. Write short notes :   **Answer any THREE questions.**   **(3 x 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.**   **(2 x 2.5 = 5)**

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 x 20 = 20)**

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 x 5 = 15)**

1. Define multimedia. Outline same of its applications.

2. Write short notes on Internet and its uses.

3. Write a note on MS-Excel and MS-PowerPoint.

4. Outline the constants and variables available in C.

5. Discuss the functions of central processing unit.

III. Short answers : **Answer any TWO questions.** **(2 x 2.5 = 5)**

1. Modem.

2. Flow chart.

3. HTTP.

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[KZ 4255]   **Sub. Code: 4255**

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 x 20 = 20)**

1. Explain the various methods of collecting primary data pointing out their merits and demerits

II. Short Notes :   **(4 x 5 = 20)**

1. 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   **(5 x 2 = 10)**

1. Histogram.

2. Define median.

3. What is scatter diagram?

4. Level of significance.

5. Define probability.

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(PTO)

SECTION B

COMPUTER APPLICATION

I. Long Essay: (1 x 20 = 20)

1. Explain the various graphic display devices.

II. Short Notes : (4 x 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 (5 x 2 = 10)

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'.

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FIRST YEAR B.PHARM. EXAM
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)

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Elaborate on:			

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 33 20

II. Short Notes:
1. Calculate Arithmetic mean for the following data
 (Discrite series) Direct methods. 3 8 5

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 8 5
3. Discuss above the random sampling. 3 8 5
4. Discuss above Multiple Bar Diagram & Percentage Bar
 Diagram. 3 8 5

III. Short Answers:
 1. Define Graph. 1 5 2
 2. Define Statistics. 1 5 2
 3. Define Probablity. 1 5 2
 4. Types of Errors. 1 5 2
 5. Explain the Mode. 1 5 2

SECTION B
(COMPUTER APPLICATION)

I. Elaborate on:

1. Explain the Importance of M.S.WORD, M.SEXCELL,
M.S.POWER POINT menus.   19   33   20

II. Write notes on:

1. Briefly explain the types of network.   3   8   5
2. Briefly explain about memory and Secondary storage
devices.   3   8   5
3. Explain the Main frame computer & Micro computer.   3   8   5
4. Briefly explain the Mailmerge concepts.   3   8   5

III. Short Answers:

1. List out any four types of Printers.   1   5   2
2. List out any four windows components.   1   5   2
3. Give the purpose of CD-Rom.   1   5   2
4. List out the applications of E-mail.   1   5   2
5. What is Web Browser.   1   5   2

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FIRST YEAR B.PHARM. EXAM
Paper V – BIOSTATISTICS AND COMPUTER APPLICATION
Q.P. Code: 564255

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

Answer Section A and Section B SEPARATELY
SECTION A
(BIOSTATISTICS)

I. Elaborate on: **(1X20=20)**

1. From the following data, calculate mean, median and mode 19   33   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: **(5X2=10)**
 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
(COMPUTER APPLICATIONS)
I. Elaborate on: **(1X20=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: **(5X2=10)**
 1. Define flow chart.
 2. Uses of MS excel.
 3. Write a note on RAM.
 4. Modem.
 5. HTTP.

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(LD 4255)   **AUGUST 2013**   **Sub Code: 4255**

FIRST B.PHARM. EXAM
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. 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 : 50 42 51 26 35 42 60 41 70 55 62 38
   Marks in II test: 62 40 61 35 30 52 68 51 84 63 72 50
   ($t_{0.05}$ for 11DF=2.20)

II. Write notes on: **(4X5=20)**
1. Find the Mean deviation about mean is 7 for the following data
   X: 15   10   7   5   3   2
2. Write Scope of statistical methods in Pharmacy
3. Write Characteristics of normal distribution
4. What are requisites of good Average?

III. Short Answers: **(5X2=10)**

1. Probability
2. Histogram
3. Primary data
4. Types of Errors
5. Systematic Sampling.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: **(1X20=20)**
1. Explain about the Library functions used in C program and give examples.

II. Write notes on: **(4X5=20)**
1. Define operating system. What are types of Operating system
2. Explain memories used in operating system
3. What are the significance of MS-Excel and explain briefly
4. Define network and explain all types of Network.

III. Short Answers: **(5X2=10)**

1. Search engine
2. Mail merge
3. FTP
4. MS-DOS
5. Word pad.

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FIRST B.PHARM. EXAM
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. 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 INOCULATED	550	450	1000
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: **(5X2=10)**

   1. Calculate Median and Mode for the following set of observations:
        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: **(5X2=10)**

   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

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FIRST YEAR B.PHARM. EXAM
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: **(1X20=20)**

1. Briefly discuss on the Sampling methods.

II. Short Notes: **(4X5=20)**

1. Write about the characteristics of statistic.
2. Distinguish between correlation and regression.
3. Calculate Standard Deviation for the following data:
   30,43,45,55,68,69,75.
4. 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: **(5X2=10)**

1. Define sample
2. Probability
3. Scatter diagram
4. Define Range
5. Define Median

SECTION - B
(COMPUTER APPLICATION)

I. Essay: **(1X20=20)**

1. Discuss briefly on the internal organization of a digital computer.

II. Short Notes: **(4X5=20)**

1. Give the characteristic features of a computer
2. Write about printer and its types
3. Discuss on the functions of operating system
4. Write about MS Word

III. Short Answers: **(5X2=10)**

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

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B.PHARM. EXAMINATION
FIRST YEAR
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 x 20 = 20)**

1. Calculate the correlation coefficient from the following data.

X:	12	9	8	10	11	13	7
Y:	14	8	6	9	11	12	3

II. Short notes: **(4 x 5 = 20)**

1. A bag contains 7 red balls and 5 white balls. FOUR balls are drawn at random. What is the probability that

   a) All of them are red   b) Two of them are red and two white.

2. Calculate the standard deviation from the following data.

   14   22   9   15   20   17   12   11

3. A sample of size 400 was drawn and the sample mean was found to be 99. Test whether this sample could have come from a normal population with mean 100 and variance 64 at 5% level of significance.

4. Explain any two methods of sampling.

III. Short answers: **(5 x 2 = 10)**

1. Chi square test
2. Histogram
3. Scatter diagram
4. Dispersion
5. Hypothesis

SECTION - B
(COMPUTER APPLICATIONS)

I. Essay: **(1 x 20 = 20)**

1. Explain all types of operators used in C program.

II. Short notes: **(4 x 5 = 20)**

1. Write a note on algorithm and flowchart.
2. Explain the advantages of MS-OFFICE package.
3. Define network. Explain the types and uses.
4. Explain the various components of CPU.

III. Short answers: **(5 x 2 = 10)**

1. Multimedia
2. URL
3. Program
4. Protocol
5. WAN

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B.PHARM. DEGREE EXAMINATION

FIRST YEAR

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 x 20 = 20)**

1. Calculate correlation coefficient and regression coefficient for following data:

X	2	4	6	8	10	12	14
Y	4	2	5	10	4	11	12

II. Short notes :   **(4 x 5 = 20)**

1. In an examination five students obtained following score in computer science.
   5, 7, 9, 13, 16
   Find Standard Deviation.
2. Discuss the different methods of sampling. Explain their merits.
3. What is an Ogive or a cumulative frequency curve? Explain with example.
4. Calculate the mean from the following data:

X	10	12	13	18	19	20	19	30
Y	8	12	6	3	19	13	17	4

III. Short answers: **(5 x 2 = 10)**

1. Define Standard Deviation.
2. Define Regression.
3. Define frequency polygon.
4. Exhaustive event.
5. Define Dispersion.

SECTION - B (COMPUTER APPLICATIONS)

I. Essay: **(1 x 20 = 20)**

1. a) Explain various types of networks, network topology.
   b) Explain **scanf** and **printf** functions.

II. Short notes :   **(4 x 5 = 20)**

1. Explain different paragraph formatting in MS WORD.
2. Explain any five string manipulation functions in C.
3. With a neat diagram explain the Basic Components of Computers.
4. Explain different types of memories.

III. Short answers: **(5 x 2 = 10)**

1. List any four MS DOS Commands.
2. Keyboard shortcuts for Bold, Italics, underline and Print in MS WORD.
3. Define Compiler
4. Define Identifier?
5. Define virus.

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FIRST YEAR B.PHARM. EXAMINATION
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 x 20 = 20)**

1. Compute Mean, Standard Deviation, variance and co-efficient of variance for following data:

Marks	0 – 20	20 – 40	40 – 60	60 – 80	80 – 100	100 – 120	120 – 140	140 – 160
No. of students	45	20	10	6	3	8	4	4

II. Short notes on :   **(4 x 5 = 20)**

1. If 3 books are selected at random from a shelf containing 4 Novels and 3 books on Poems and one dictionary. What is the probability that
   a) Dictionary is selected   b) Two novels one book on poem is selected
2. Distinguish between Primary and Secondary data.
3. Two judges in a beauty competition ranked the 12 entries as below:-

X	1	2	3	4	5	6	7	8	9	10	11	12
Y	12	9	6	10	3	5	4	7	8	2	11	1

   What degree of agreement is there between the judges?
4. Write down various measures of dispersion along with their advantages.

III. Short answers on :   **(5 x 2 = 10)**

1. Define Random and Non Random experiment.
2. Define Positive and Negative Correlation.
3. Define Sample and give an example.
4. Define Tabulation in collection of data.
5. Define Harmonic mean.

SECTION - B
(COMPUTER APPLICATION)

I. Essay :   **(1 x 20 = 20)**

1. a) Explain any five Input devices.
   b) C character set.
   c) How will you send and receive e-mail?

II. Short notes on :   **(4 x 5 = 20)**

1. Explain switch statement with example.
2. Explain different types of Operating systems.
3. What are the uses of MS PowerPoint?
4. Define Internet. Explain various applications of Internet.

III. Short answers on :   **(5 x 2 = 10)**

1. Define Multimedia.
2. List out the relational operators in C.
3. Define Token.
4. What is Browser? Give any two examples.
5. List any four secondary storage devices.

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FIRST YEAR B. PHARM. EXAMINATION
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. Elaborate on: **(1 x 20 = 20)**

1. a) Find the coefficient of variation for the following data.

     C.I : 10 – 20   20 – 30   30 – 40   40 – 50   50 – 60   60 – 70
     F :   10   15   32   40   22   18

     b) Calculate Mean and Median from following data:

Class Internal	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	10	20	35	40	25	25	15

II. Write notes on: **(4 x 5 = 20)**

1. A person is known to hit a target 3 out of 4 shots where as an other person is known to hit the same target 2 out of 3 shots. Find the probability of the target being hit when they both try.
2. Following are the rank obtained by 5 students in computer and statistics. Calculate pearman's rank correlation coefficient.
    Computer :   5   2   1   4   3
    Statistics :   4   3   5   1   2
3. Write about the most commonly used graphs.
4. Write a note on measures of central tendency.

III. Short answers on: **(5 x 2 = 10)**

1. Harmonic mean
2. Classification
3. Pie diagram
4. Variance
5. Define Averages

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: **(1 x 20 = 20)**

1. Draw the block diagram of a computer and explain the functions of various units.

II. Write notes on: **(4 x 5 = 20)**

1. Write a note on memory.
2. Explain the types of computer.
3. Write about the OPERATORS available in C language.
4. Write about the conditional statements.

III. Short answers on: **(5 x 2 = 10)**

1. Keyword
2. Ethernet
3. Array
4. EPROM
5. MICR

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FIRST YEAR B. PHARM. EXAMINATION
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. Elaborate on: **(1 x 20 = 20)**

  1. A problem in statistics is given to two students for solving. Probability that first student
     will solve the problem is 2/3 and probability that second student will solve the problem is
     3/4. Find the probability that:
        i)   Both the students will solve the problem.
        ii) Both the students will not solve the problem.
        iii) Problem will be solved.

II. Write notes on: **(4 x 5 = 20)**

  1. What is scope of statistics in pharmaceutical research?
  2. What is primary data? Discuss any two methods of collecting primary data pointing out
     merits and demerits.
  3. Discuss about the null hypothesis and alternate hypothesis.
  4. From the following data obtained the regression equation of X on Y.

X	16	20	17	21	15
Y	50	60	58	60	55

III. Short answers on: **(5 x 2 = 10)**

  1. What is the meaning of Ogivegraph?
  2. Chi square test.
  3. Define dispersion.
  4. Histogram.
  5. Find mean, median and mode for the following observations 7, 12, 9, 15, 10, 12.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: **(1 x 20 = 20)**

  1. Explain the various types of Networks and Topologies.

II. Write notes on: **(4 x 5 = 20)**

  1. How computer assisted drug design?
  2. Explain the characteristics of computer system.
  3. Difference between primary memory and secondary memory.
  4. Explain scanf ( ) and printf ( ) functions.

III. Short answers on: **(5 x 2 = 10)**

  1. Define compiler.
  2. Define CPOE.
  3. Identifier.
  4. Mail merge.
  5. List out string functions in C.

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B. PHARM. DEGREE EXAMINATION
FIRST YEAR
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. Elaborate on: **(1 x 20 = 20)**

1. Calculate the standard deviation for the following data.

C.I:	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 - 80
F:	18	16	15	12	10	5	2	1

II. Write notes on: **(4 x 5 = 20)**

1. Two dice are thrown. Find the probability that:
    a) The total of the numbers on the dice is 8.
    b) Both the dice show the same number.
2. Draw a histogram from the following data and calculate the mode.

Size:	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50
F :	10	14	19	17	13

3. Write a note on scatter diagram.
4. Explain any two methods of sampling.

III. Short answers on: **(5 x 2 = 10)**

1. Correlation.
2. Median.
3. Range.
4. Probability.
5. Mutually exclusive events.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: **(1 x 20 = 20)**

1. a) What are the types of memory? Explain.
    b) Write about the secondary storage devices.

II. Write notes on: **(4 x 5 = 20)**

1. What are the characteristics of a computer? Explain.
2. Write a note on algorithm and flowchart.
3. Write about system software and application software.
4. Write a note on SWITCH statement.

III. Short answers on: **(5 x 2 = 10)**

1. HTML.
2. Software.
3. Compiler.
4. Spreadsheet.
5. Scanner.

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B. PHARM. DEGREE EXAMINATION
FIRST YEAR
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. Elaborate on: (1 x 20 = 20)

1. Find the mean, median and mode for the following data.

C.1: 0–10 10–20 20–30 30–40 40–50 50–60

F :   12   18   27   20   17   6

II. Write notes on: (4 x 5 = 20)

1. A bag contains 7 red, 12 white and 4 green balls. What is the probability that
   a) 3 balls drawn are all white.
   b) 3 balls drawn are one of each colour.
2. Marks in computer and chemistry are found to be
   Computer : 90   75   60   80   40   88
   Chemistry : 63   55   46   68   70   85
   Calculate rank correlation coefficient.
3. Write about any two types of sampling methods.
4. Calculate standard deviation for the following data.
      50   55   57   49   54   61   64   69   58   55

III. Short answers on: (5 x 2 = 10)

1. Geometric mean.
2. Level of significance.
3. Bardiagram.
4. Sample.
5. Regression.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: (1 x 20 = 20)

1. a) Explain in detail about looping structures in C.
   b) Explain scanf ( ) and Printf ( ) functions.

II. Write notes on: (4 x 5 = 20)

1. Write a note on internet and its applications.
2. Define topology. Explain the types.
3. Write about the operators available in C language.
4. Write about the conditional statements.

III. Short answers on: (5 x 2 = 10)

1. Keyword.
2. Simple IF statement.
3. Array.
4. Protocol.
5. Browser.

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B. PHARM. DEGREE EXAMINATION
FIRST YEAR
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. Elaborate on: **(1 x 20 = 20)**

1. Find Regression lines and regression coefficient for following data:

X	6	2	10	4	8
Y	9	11	5	8	7

II. Write notes on: **(4 x 5 = 20)**

1. What are the application of Chi-Square (X^2) test?
2. Discuss about stratified random sampling method.
3. Calculate mode for the following data.

Class limits	0–30	30–60	60–90	90–120	120–150	150–180
Frequency	8	13	22	27	18	7

4. Distinguish between correlation and regression.

III. Short answers on: **(5 x 2 = 10)**

1. Define primary data.
2. Define probability.
3. Harmonic mean.
4. Define positive and negative correlation.
5. Define regression.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: **(1 x 20 = 20)**

1. Explain in detail about Hardware and software.

II. Write notes on: **(4 x 5 = 20)**

1. What are the characteristic of computer system?
2. Explain memory management in the system.
3. Discuss about the various types of operators in 'C' Language.
4. Write notes on internet and its uses.

III. Short answers on: **(5 x 2 = 10)**

1. WWW.
2. Search engine.
3. Define variable.
4. Define compiler.
5. List out String handling functions used in 'C'.

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B. PHARM. DEGREE EXAMINATION
FIRST YEAR
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. Elaborate on: (1 x 20 = 20)

1. a) Calculate mean deviation about mean:

X	10	11	12	13
F	3	12	18	12

   b) In a vocal music contest, two judges rank 10 competitors in the following order:

Ranking A	6	4	3	1	7	9	8	10	5	2
Ranking B	4	1	6	7	8	10	9	3	2	5

What is the Coefficient of rank correlation?

II. Write notes on: (4 x 5 = 20)

1. Write about any two types of sampling methods.
2. What are the scope of statistics in medicine and pharmacy?
3. Discuss about bar diagram and Histogram.
4. Calculate Mean, Median, Mode for the following data :
     61, 62, 63, 61, 63, 64, 64, 60, 65, 63, 64, 65, 66, 64.

III. Short answers on: (5 x 2 = 10)

1. Define Geometric mean.
2. Define probability.
3. Secondary data.
4. Hypothesis.
5. Level of significance.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: (1 x 20 = 20)

1. Explain about decision making statements in 'C' language.

II. Write notes on: (4 x 5 = 20)

1. Discuss about any three storage devices.
2. Explain array with its types.
3. Discuss about the functions of operating system.
4. Briefly explain the mail merge concepts.

III. Short answers on: (5 x 2 = 10)

1. Define anti-virus.
2. Difference between RAM and ROM.
3. Define multimedia.
4. Modem.
5. Define ALU.

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(LP 4255)   **AUGUST 2019**   Sub Code: 4255

B. PHARM. DEGREE EXAMINATION
FIRST YEAR
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. Elaborate on: **(1 x 20 = 20)**

  1. Explain the various methods of sampling.

II. Write notes on: **(4 x 5 = 20)**

  1. A bag contains 4 white 3 black and 5 red balls. What is the probability of getting a white or red ball at random in a single draw?
  2. Calculate the mean from the following data:
       49   70   54   67   59   40   61   69   71   52
  3. Write about the simple bar diagram and pie diagram.
  4. What are the steps involved in Chi square test?

III. Short answers on: **(5 x 2 = 10)**

  1. Statistics.
  2. Probability.
  3. Correlation.
  4. Dispersion.
  5. Hypothesis.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: **(1 x 20 = 20)**

  1. a) Write about various graphical input and output devices.
     b) Explain the types of operators available in C language.

II. Write notes on: **(4 x 5 = 20)**

  1. Write a note on algorithm and flowchart.
  2. Explain the features of Ms-Word and Ms-Excel.
  3. Define topology. Explain the types.
  4. Explain the applications of computer in pharmacy.

III. Short answers on: **(5 x 2 = 10)**

  1. Multimedia.
  2. URL.
  3. HTML.
  4. Protocol.
  5. Browser.

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THE TAMIL NADU Dr.M.G.R. MEDICAL UNIVERSITY

(LQ 4255)   **FEBRUARY 2020**   Sub Code: 4255

B. PHARM. DEGREE EXAMINATION
FIRST YEAR
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. Elaborate on: **(1 x 20 = 20)**

1. Calculate Spearman's rank correlation coefficient between the following marks given by two judges in the series of eight one act plays in a drama competition.

Marks by Judge A	81	72	60	33	29	11	56	42
Marks by Judge B	75	56	42	15	30	20	60	80

II. Write notes on: **(4 x 5 = 20)**

1. What is primary Data? Discuss any two methods of collecting primary data Pointing out Merits and Demerits.
2. Discuss about the Null hypothesis and alternative hypothesis.
3. Calculate Median

Class	0-20	21-30	31-40	41-50	51-60
Frequency	42	36	120	84	48

4. What is the scope of statistics in Pharmaceutical Research?

III. Short answers on: **(5 x 2 = 10)**

1. What is the meaning of Ogive graph?
2. Chi Square test.
3. Define Dispersion.
4. Histogram.
5. Hypothesis.

SECTION - B
(COMPUTER APPLICATION)

I. Elaborate on: **(1 x 20 = 20)**

1. Describe about the infrastructure of a computer system and various types of input and output devices.

II. Write notes on: **(4 x 5 = 20)**

1. Write short notes on MS-OFFICE package.
2. Discuss about memory of Computer system.
3. Define Network. Explain types of network.
4. Explain about any two types of decision making statements in C - Language.

III. Short answers on: **(5 x 2 = 10)**

1. MS-DOS.
2. Open Source Software.
3. ATM.
4. TCP/IP.
5. Bluetooth.

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