



Graphic Era
HILL UNIVERSITY

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University under section 3(2) of UGC Act, 1956

GEH/01/18

Sessional II (Even) Semester Examination, May 2025

Roll no.

Name of the Course and semester: **B.Pharm. VIII**

Name of the Paper: **Biostatistics & Research Methodology (Theory)**

Paper Code: **BP 801T**

Time: **1 hour 30 minutes**

Maximum Marks: **30**

Note:

(i) *This question paper contains three sections.*

(ii) *All the questions are compulsory.*

Section-A

Q1. Multiple Choice Questions – Attempt all questions

(10 X 1 = 10 Mark)

- a) Which test is used to measure pair of groups or two samples? (CO3)
 - i. Wilcoxon Rank Sum Test
 - ii. Mann Whitey U Test
 - iii. T Test
 - iv. Chi Square Test
- b) Which plagiarism software is used in Research Institute in India and Top Leading Global Research Institutes? (CO1)
 - i. Ithenticate
 - ii. DrillBit
 - iii. Plagiarism Checker
 - iv. Urkund
- c) Which plot will be used to represent Drug response Curve? (CO2)
 - i. Scatter Plot
 - ii. Line with Scatter Plot
 - iii. 3D Histogram
 - iv. Line graph
- d) The study of Covid patients within institute for 6 months with real time study of e week. Which study is this? (CO3)
 - i. Cross Sectional Study
 - ii. Cohort Study
 - iii. Double Blind Study
 - iv. Randomised study
- e) Which phase donot belongs to Clinical Trial? (CO3)
 - i. Phase V
 - ii. Phase IV
 - iii. Phase VI
 - iv. Phase III

- f) Which software is used of Design of Experiment?
 - i. T Software
 - ii. R Software
 - iii. W Software
 - iv. Vigi Flow Software
- g) Which statistical tool is used by core Research Population?
 - i. Graph Pad Prism
 - ii. SPSS
 - iii. Microsoft Excel
 - iv. R Software
- h) Identify the Role of MINITAB.
 - i. Analyse the Data
 - ii. Interpret the Data
 - iii. Draw the Graph for the Data
 - iv. Represent the Data
- i) Which Software is used to analyse the critical data related to pharmaceutical Research?
 - i. Graph Pad Prism
 - ii. EXCEL
 - iii. SAS
 - iv. STATA
- j) Which one of point is revealing importance of Regression Modelling?
 - i. Identify relevant prognostic factors for diseases
 - ii. Determine the relationship between several factors and disease
 - iii. Interpreting test results to improving your career prospects
 - iv. Analysis of clinical trials

Section B

Q. 2 Short Questions: Attempt any two questions

(2X 5 = 10)

- a. 20 Patients are having Paracetamol for consecutive 10 days and develop side effects like hepatotoxicity. Design a Research Project for this issue. M LFT & duration of Dose and Dose Regimen and strategies to Reduce this (CO3)
- b. Elaborate All the graphical Representation with Examples and elucidate the clinical research?
- c. A clinical researcher has four different software for statistical analysis. Explain one of them in tabular form and flow diagram?

Section C

Q. 3 Long questions: Attempt any one question

(1X10 = 10)

- a. Design A Research Project based on Anticancer drug consumption highlighting parameters like Pain Score, Chemotherapy, Stage of cancer and Inflammatory Markers? Use Imaginary Values for 10 Patients.
- b. Write in a well labelled tabular representation about all Statistical Tools & with their uses and how they are important in clinical Research and Industry (CO4)