

FACULTY OF PHARMACY

B. Pharmacy VIII - Semester (PCI) (Backlog) Examination, March 2024

Subject: Biostatistics & Research Methodology

Time: 3 Hours

Max. Marks: 75

PART-A

Note: Answer all the questions.

(10 x 2 = 20 Marks)

1. Find the median of the disintegration times of tablets for a data set 1, 4, 8, 3, 5, 7, 2, 10 and 6.
2. Calculate the range for individual series-X: 120,170,240,100, 105, 205, 300, 160, 150, 180.
3. Define the term Probability.
4. What is meant by population?
5. Give different non-parametric tests.
6. What is the need for design of experiments?
7. Mention different types of graphs.
8. Write statistical features of EXCEL.
9. Mention advantages of factorial design.
10. Give different phase of clinical trials.

PART-B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

11. Explain about report writing in research methodology.
12. Write informative notes on (a) Plagiarism (b) Types of sampling.
13. What is SPSS? Write about its models.

PART-C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

14. Discuss about Karl Pearson's coefficient of correlation.
15. Find the standard deviation of incubation period of small pox in 9 patients where it was found to be 15,12,10,15,11,7,9,17 and 14.
16. What is normal distribution? Explain the properties with a suitable example.
17. Write short notes on ANOVA.
18. A quality control analyst finds that on the average the sample passes the test 4 times out of 5. If the sample is tested 4 times, what is the probability of
(a) Sample passing more than 2 times (b) At least 3 failures
19. Write notes on any one non-parametric test.
20. Discuss about statistical features of MINITAB.
21. Explain designing of a clinical trial.
22. Explain 2^2 factorial design with an example.