

DAO-M202116

Seat No.

Fourth Year D. Pharm. (Theory) Examination April / May - 2022

Biostatistics & Research Methodology (4.4)

Time: Hours] [Total Marks: 70

Instruction: (1) Figure to the right side indicate marks.

(2) Draw neat and clean diagram when required.

1 Answer all the following questions.

 $2 \times 10 = 20$

- (1) Explain the term research with suitable example.
- (2) Enlist various types of clinical study designs.
- (3) What is biostatistics?
- (4) Discuss the central tendency with example.
- (5) Which tool is required to explain the data graphically?
- (6) Define p-value. Give its significance.
- (7) Give the difference between Incidence and Prevalence.
- (8) What are the advantages of computerized literature retrieval?
- (9) Explain the meaning of non parametric test.
- (10) Give the difference between sample and population.
- 2 Answer following questions. (ANY 2 out of 3) $10 \times 2 = 20$
 - (1) Explain in detail about measure of dispersion/spread with suitable examples.
 - (2) What are data? Classify them. Explain in details about the construction and labelling of graphs.
 - (3) Give the use of computer system in Hospital Pharmacy.

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- 3 Answer following questions. (ANY 6 out of 8) $5\times6=30$
 - (1) Discuss on Spearmann's correlation coefficient of correlation with suitable example.
 - (2) Discuss in detail about Two way- ANOVA.
 - (3) Enlist various Parametric tests. Write a note on Chi-Squaretest.
 - (4) Write the overview on hypothesis. Describe the basics of testing of hypothesis.
 - (5) Describe the unpaired t-test with suitable example.
 - (6) Write in detail about relative risk and attributable risk.
 - (7) Explain the significance of coefficient of variation and standard error of mean.
 - (8) Write the applications of computer in community pharmacy with special emphasize on computerizing the prescription dispensing process.