School of Medical and Allied Sciences
Pharmacy
ETE - May 2023

Time : 3 Hours   **Marks : 75**

Sem VIII - BP801T - Biostatistics and Research Methodology
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1.	Recall the 'differences' between Statistics and Biostatistics.	K1 CO1 (2)
2.	Contrast the term 'Biostatistics'.	K2 CO1 (2)
3.	Recall the meaning of 'Regression Analysis' in Statistics.	K1 CO2 (2)
4.	Infer the term 'Probability' in Biostatistics.	K2 CO2 (2)
5.	Choose the benefits of 'Cohort Studies' in Research.	K1 CO3 (2)
6.	Interpret the Observational studies and Experimental studies in designing the research methodology	K2 CO3 (2)
7.	Define 'Blocking System' for Two-level factorials.	K1 CO4 (2)
8.	Outline the differences between Blocking and Confounding system for Two-level factorials.	K2 CO4 (2)
9.	What do you understand by Response Surface Methodology in Research?	K1 CO5 (2)
10.	Infer the different types of factorial design.	K2 CO5 (2)
11.	Construct the differences between Fundamental and Applied Research.	K3 CO1 (5)
	OR	
	Organize the 'roles' of 'Frequency distribution' in Research Methodology.	
12.	Categorize the significances and applications of 'Measures of Dispersion' in research.	K4 CO1 (5)
13.	Identify the 'Significances' of Bionomial and Normal Distributions in Statistics.	K3 CO2 (5)
14.	Categorize in detail one way and two-way 'ANOVA' in Research Methodology.	K4 CO2 (5)
15.	Organize the application of different 'graphical presentations' in Research.	K3 CO3 (5)
16.	Assume the 'need' for research in Research methodology.	K4 CO3 (5)
	OR	
	Simplify the benefits of 'Wilcoxon Rank Sum Test' in Research Methodology and Biostatistics	
17.	Originate the 'Current challenges' in Research Methodology.	K6 CO6 (5)
18.	Interpret the Statistical Analysis using 'Excel' and 'MINITAB' Software's.	K5 CO4 (10)
19.	Discuss the advantages and applications of factorial design in research methodology.	K6 CO5 (10)
	OR	
	Estimate the Siginificances and Challenges of Optimization techniques in Response Surface methodology	