

Code No: PD404

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****Pharm.D IV Year Supplementary Examinations, October/November - 2019****BIOSTATISTICS AND RESEARCH METHODOLOGY****Time: 3hours****Max.Marks:70**

**Answer any five questions**  
**All questions carry equal marks**

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1. Write about the following:  
a) Clinical study design – Interventional studies  
b) Determination of sample size. [7+7]
2. How do you write a report of scientific investigation and explain various methods for presentation of data? [14]
3. Write notes on the following:  
a) Merits and demerits of mean  
b) Coefficient of variation  
c) Chi-square test. [5+4+5]
4. Write in detail about the following:  
a) Histogram  
b) Scatter plots  
c) Semilogarithmic plots. [4+5+5]
5. Explain with example the use of computers for pharmaceutical care in community pharmacy. Add note on prevalence. [14]
6. Write short notes on the following:  
a) SAS  
b) Null hypothesis  
c) Wilcoxon's signed rank test. [5+4+5]
7. In a HPLC analysis the peak height (mm) vs. concentration (mg/ml) of a drug solution is as follows:  

Conc.	5	10	15	20	30	35	40	45	
Peak height	50	150	145	190	180	310	285	395	385

  
Calculate Pearson's correlation coefficient for the above data. [14]
8. Write in brief about the following:  
a) Patient record database management  
b) Inventory control in hospital pharmacy. [7+7]

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