Chandigarh Engineering College Landran, Mohali
CGC-COE
Department of Applied Sciences

Assignment No 1

Subject and Subject code: Mathematics –II/ BTAM-204-18 Semester 2nd M.M.=30

Date on which assignment given: 4/05/2019 Date of submission of assignment: 18/05/2019

Course Outcomes

CO1: calculate averages and dispersion of different type of data.

CO2: recapitulate the basic concepts of probability and random variables.

CO3 apply the idea of various probability distributions to analyze the data.

CO4: find the degree of correlation of two and more variables using correlation and regression analysis.

CO5: deal with the sampling distributions by using statistical methods.

	Assignment related to COs	Relevance to CO No.
	SECTION - A (2Marks Each)	
Q1.	State and prove Relationship between A.M. , G.M. and H.M. of two numbers.	**CO-1**
Q2.	Find interquartile range, Q.D. and coefficient of Q.D. from the following data: 28, 18,20 ,24,27,30,15	**CO-1**
Q3.	What is the utility of moments.	**CO-1**
Q4.	State Spearman's Rank correlation coefficient.	**CO-4**
Q5.	Given Cov(X,Y)=15, Var(X)=36, Var(y)= 25, Calculate Coefficient of correlation.	**CO-4**
	SECTION – B (4 Marks Each)	
Q6.	The median and mode of the following wage distribution of 230 workers are known to be Rs 33.5 and Rs 34 respectively. Three frequency values from the table are however is missing. Find the missing values.	**CO-1**

	WAGES	NO. OF WORKERS	
	0-10	4	
	10-20	16	
	20-30	?	
	30-40	?	
	40-50	?	
	50-60	6	
	60-70	4	
	Total	230	
Q7.	From the price of shares of X and Y are given below, state which share is more stable in value: X: 41 44 43 48 45 46 49 50 42 40 Y: 91 93 96 92 90 97 99 94 98 95		**CO-1**
Q8.	From the following table , find out Kelly's Coefficient of skewness based on percentiles: MARKS : 0-10 10-20 20-30 30-40 40-50 50-60 NO.OF STUDENTS: 4 6 20 10 7 3		**CO-1**
Q9.	Calculate Karl Pearson's coefficient of correlation from the following data: X: 24 27 28 28 29 30 32 33 35 35 40 Y: 18 20 22 25 22 28 28 30 27 30 22		**CO-4**
Q10.	Find the coefficient of correlation from the following data: $N = 10, \overline{X} = 5.5, \overline{Y} = 4, \sum X^2 = 385, \sum Y^2 = 192, \sum (X+Y)^2 = 947$		**CO-4**