## **DRONACHARYA COLLEGE OF ENGINEERING**

KHENTAWAS, FARRUKHNAGAR, GURGAON, HR

Department : CSE

Academic Session: (MAY- AUG 2021)

## **Lesson Plan with Assignment questions**

## Subject with code: Math-II (Probability and Statistics) BSC-MATH-104G

Name of Faculty with designation :Ms. Shivani Gupta, Assistant Professor

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Write Lecture Wise Questions	Remarks
		II CSE	I	Definition and Examples of Random Experiment, Event Spaces, Sample Spaces, Probability function and Probability Spaces	Assignment of 02 Ques. given	
		II CSE	I	Conditional probability: Definition, Theorem on Compound Probability and total Probability	Assignment of 02 Ques. given	
		II CSE	I	Questions based on Conditional probability	Assignment of 02 Ques. given	
		II CSE	I	Discrete random variables and their Expectation	Assignment of 02 Ques. given	
		II CSE	I	Independent random variables, Sums of independent random variables	Assignment of 02 Ques. given	
		II CSE	I	Moments- about any arbitrary point and about mean	Assignment of 02 Ques. given	
		II CSE	I	Variance of a sum	Assignment of 02 Ques. given	
		II CSE	1	Correlation coefficient	Assignment of 02 Ques. given	
		II CSE	-	Chebyshev's Inequality	Assignment of 02 Ques. given	
		II CSE	I	The multinomial distribution	Assignment of 02 Ques. given	
		II CSE	-	Poisson approximation to the binomial distribution	Assignment of 02 Ques. given	
		II CSE	1	Infinite sequences of Bernoulli trials	Assignment of 02 Ques. given	
		II CSE	II	Continuous random variables- Cumulative distribution Function, Probability Density Function, Expectation and Variance	Assignment of 02 Ques. given	
		II CSE	II	More properties of Continuous random variables	Assignment of 02 Ques. given	

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Write Lecture Wise Questions	Remarks
		II CSE	II	Distribution functions and densities	Assignment of 02 Ques. given	
		II CSE	II	Normal, Exponential and Gamma densities	Assignment of 02 Ques. given	
		II CSE	II	Normal, Exponential and Gamma densities Continued	Assignment of 02 Ques. given	
		II CSE	II	Definition and Examples of Bivariate distributions	Assignment of 02 Ques. given	
		II CSE	II	Properties of Bivariate Distributions and based problems	Assignment of 02 Ques. given	
		II CSE	II	Distribution of sums and quotients	Assignment of 02 Ques. given	
		II CSE	II	Conditional densities	Assignment of 02 Ques. given	
		II CSE	II	Bayes' rule	Assignment of 02 Ques. given	
		II CSE	1,11	Revision of Unit-I and II	Assignment of 02 Ques. given	
		II CSE	III	Introduction to Measures of Central tendency	Assignment of 02 Ques. given	
		II CSE	III	Moments, Skewness and Kurtosis - Definition and Examples	Assignment of 02 Ques. given	
		II CSE	III	Problems based on Moments, Skewness and Kurtosis Continued	Assignment of 02 Ques. given	
		II CSE	III	Binomial Distribution	Assignment of 02 Ques. given	
		II CSE	III	Poisson Distribution	Assignment of 02 Ques. given	
		II CSE	III	Normal Distribution	Assignment of 02 Ques. given	
		II CSE	III	Evaluation of statistical parameters of Binomial, Normal and Poisson Distribution	Assignment of 02 Ques. given	
		II CSE	III	Correlation- Karl Pearson's Coefficient of Correlation	Assignment of 02 Ques. given	
		II CSE	III	Rank Correlation	Assignment of 02 Ques. given	
		II CSE	III	Regression	Assignment of 02 Ques. given	
		II CSE	III	Curve fitting by the method of least squares-fitting of straight lines	Assignment of 02 Ques. given	

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Write Lecture Wise Questions	Remarks
		II CSE	III	Curve fitting by the method of least squares -second degree parabolas	Assignment of 02 Ques. given	
		II CSE	III	Curve fitting by the method of least squares -more general curves.	Assignment of 02 Ques. given	
		II CSE	IV	Introduction to Hypothesis Testing	Assignment of 02 Ques. given	
		II CSE	IV	Sampling Distribution and Central Limit Theorem	Assignment of 02 Ques. given	
		II CSE	IV	Test of Significance- Large Sample Tests for Single Proportion	Assignment of 02 Ques. given	
		II CSE	IV	Test of Significance- Large Sample Tests for Difference of Proportions	Assignment of 02 Ques. given	
		II CSE	IV	Significance Tests for single mean	Assignment of 02 Ques. given	
		II CSE	IV	Significance Tests for Difference of Means	Assignment of 02 Ques. given	
		II CSE	IV	Significance Test For Difference of Standard Deviations	Assignment of 02 Ques. given	
		II CSE	IV	Student's t- Distribution	Assignment of 02 Ques. given	
		II CSE	IV	Small Sample Test For Single Mean	Assignment of 02 Ques. given	
		II CSE	IV	Small Sample Tests For Difference of Means and Correlation Coefficients	Assignment of 02 Ques. given	
		II CSE	IV	Test for ratio of variances	Assignment of 02 Ques. given	
		II CSE	IV	Chi-Squrae Test for goodness of fit	Assignment of 02 Ques. given	
		II CSE	IV	Chi-Squrae Test for independence of attributes	Assignment of 02 Ques. given	
		II CSE	IV	General Revision	Assignment of 02 Ques. given	