

ANSWER ANY TWO (2*15 = 30)

	Question	Max Marks	Blooms Level #
1a	Demonstrate how CDF can be used to generate random numbers.	05	A
1b	The annual sales of vehicles in million is given below. 2013 - 9, 2014 - 11, 2015 - 12, 2016 - 10, 2017 - 9, 2018 - 8 a) Find the least square regression line $y = a x + b$. b) Use the least squares regression line as a model to estimate the sales for 2019.	10	E
2a	How can Bayesian estimation be used to calculate confidence intervals?	07	U
2b	Score of students in a course is distributed normally with an average of 74 and standard deviation of 7. Estimate the proportion of students scoring between 60 and 80.	08	E
3a	Why is randomised controlled trial used to determine a causal relationship?	08	R
3b	State and analyse the implications of PMF of Binomial distribution and its coefficient.	07	U

#R – Remember; U – Understand; A – Analyze; E - Evaluate

Course Outcomes meant to be assessed by the first IA Test: CO1, CO2