Cass Test - 2

Time: 20 min. | Marks: 15

Student ID :…… Program :…… Semester: Spring/Summer/Fall Year :……

Course Code :…… Course Title :…… Section :…… Date :……

Class Test No. : …… Signature of the Course Teacher :……

Q1.	CSE Department of DIU is interested in predicting whether students will pass or fail their final exams based on certain characteristics, Study Hours per week, Previous Exam Scores Average, and Attendance percentages. The target variable indicating whether the student will pass (1) or fail (0) in the final exam. Table 1: Example dataset ***Study Hours*** | ***Previous Exam Scores*** | ***Attendance (%)*** | ***Passed Exam (Target)*** *5* | *75* | *90* | *Pass* *1* | *60* | *65* | *Fail* *7* | *85* | *-95* | *Pass* *3* | *50* | *80* | *Fail* *8* | *Null* | *92* | *Pass* *2* | *65* | *70* | *Null* Now answer the following questions,	
	a) Apply appropriate data pre-processing technique(s) to prepare the Dataset. Justify why the technique(s) is/are used.	(5)
	b) Apply encoding strategy if required. Explain where and why the technique is used.	(5)
	c) Consider an important feature and design a univariate linear regression model where applicable. Justify your answer.	(5)