
 KEMENTERI/ PENDIDIKAN MALAYSIA  JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS	
		COURSEWORK ASSESSMENT		QUIZ 1	
		SESSION		DECEMBER 2018	
		DURATION	15 MINS	CLO1	10 MARKS
CLO2					
CLO3					
NAME					
REGISTRATION NO.					
PROGRAMME/ SECTION		TOTAL MARKS		10 MARKS	

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

Question 1

CLO2, C2

[5 marks]

If $X = \{a, e, i, o, u\}$ and $Y = \{a, b, c, d, e\}$.

- Identify $Y - X$.
- Given the universal set $U = \{a, b, c, d, e, f, g, i, o, u, z\}$. What is the complement of $X \cup Y$?
- Is set X and Y disjoint sets? Explain your answer.

Question 2

CLO2, C3

[5 marks]

Given function $f(x) = 4x - 1$. The domain for the function is $\{-1, 0, 1\}$.

- Identify the range for $f(x)$.
- Is the function f one-to-one? Explain your answer.
- What is the inverse function for the function above?