BAHRIA UNIVERSITY, (Karachi Campus)

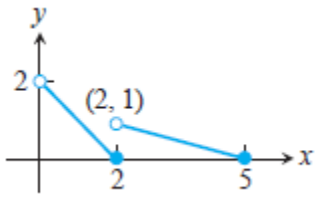
Department of Software Engineering

Quiz 2 - Fall 2022

COURSE TITLE:	**Calculus and Analytical Geometry**	COURSE CODE:	**GSC-110**
Class:	**BSE-I (B)**	Shift:	**Morning**
Course Instructor:	**MR. DANIYAL UR REHMAN**	Time Allowed:	**20 min**
Date:	**11-11-2022**	Max. Marks:	**10 Marks**

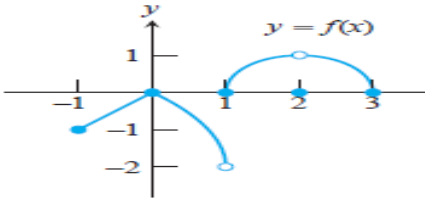
[CLO2: 2.5 Marks]

Question No. 1 Express the formula for piecewise function f(x) from the given figure



Question No. 2 a) Give the reason for discontinuity of function $f(x) = \frac{x^2-16}{x-4}$ at point $x = 4$

b) Given that the following statements about the function $y = f(x)$ graphed here, identify true false



i. $\lim_{x\to 2} f(x)$ does not exist _____

ii. $\lim_{x\to !} f(x)$ does not exist _____

iii. $f(-1)$ = undefined _____

iv. $f(3) = 0$ _____

Question No. 3 Find the equation of the tangent to the curve $y = 3x + \frac{2}{x}$ at the point $(1, -3)$