Centre for Preparatory Studies (CPS)

Math Unit

Math for Computer Science (FPMC 100)

Model Paper Final Exam

Term 1 Fall, 2024-25

Student Name										
Student ID										**Date: 14/11/2024**
Section	**1**									**Duration: 2 hours**
Instructor/s	**Dr.Wajdi Hamza Alredany**									

General Instructions

- Place your DU ID card on your desk throughout the examination period.
- Read the task instructions carefully.
- Use only a blue or black pen. (Pencil is allowed only for writing tasks)
- Not allowed to use programmable calculators, smart-watches/phones, or any other smart devices inside the exam hall.
- Must abide by DU's Academic Integrity Policy (AIP)- Policy No. DU-AC-007

Dhofar University's Academic Integrity Policy (AIP) is intended to foster hard work, honesty, and responsibility. It strictly prohibits all forms of academic misconduct, including cheating and collusion, plagiarism, and impersonation. By signing below, I agree to abide by the AIP.

تهدف سياسة النزاهة الأكاديمية بجامعة ظفار إلى تعزيز العمل الجاد والأمانة والمسؤولية و تحظر تمامًا جميع الأشكال التي تخالف النزاهة الأكاديمية، بما في ذلك الغش والتواطؤ والسرقة الأدبية والإنتحال. بالتوقيع أدناه ، أوافق على الالتزام بسياسة النزاهة الأكاديمية.

Signature of the student _____

Marking Grid								
Question 1		10	Question 2		15	Question 3		15
				Total		40		

Marked by: _____	**Moderated/ Checked by:** _____
Signature: _____ **Date:** _____	**Signature:** _____ **Date:** _____

Question 1: Circle the correct answer. (10 Marks)

1. The solution for $y + 1 = 1$ is:

A. 2 B. -2 C. 1 D. 0

2. The solution for $2y = 2$ is:

A. 2 B. 1 C. 3 D. 0

3. The solution for $-3y = -6$ is:

A. 6 B. 9 C. -2 D. 2

4. The solution for $y - 4 = 5$ is:

A. 1 B. 9 C. 6 D. -9

5. The solution for $3y > 0$ is:

A. $y > -3$ B. $y < 3$ C. $y > 0$ D. $y < 0$

6. The solution for $y - 1 < 1$ is:

A. $y < 2$ B. $y < -2$ C. $y < 0$ D. $y > 0$

7. Which inequality represents the given graph 

A. $x > 0$ B. $x < 0$ C. $x \geq 0$ D. $x \leq 0$

8. Write the inequality in interval form $x \leq 1$

A. $]1, \infty[$ B. $]-\infty, 1[$ C. $]-\infty, 1]$ D. $[1, \infty[$

9. Write the interval in inequality form $]0, \infty[$

A. $x < 0$ B. $x \leq 0$ C. $x > 0$ D. $x \geq 0$

10. Write the interval in inequality form $]-\infty, 10]$

A. $x \geq 10$ B. $x < 10$ C. $x > 10$ D. $x \leq 10$

Question 2: Solve each equation for y. (15 Marks)

a)	$y + 9 = 10$	(5 marks)
b)	$\frac{x+3}{2} = \frac{x}{5}$	(5 marks)
c)	$2(3y - 4) = 2y$	(5 marks)

Question 3: Find the solution to the inequality, graph the solution, and express the solution as an interval. (15 Marks)

a)	$2y - 8 > y$	(5 marks)
b)	$(2y - 1) \leq y + 1$	(5 marks)
c)	$3(y - 1) \geq 2(y + 1)$	(5 marks)

End of Model Paper Final Exam

SCRATCH SHEET

Name: _____

Note:

1. This scratch sheet will not be marked.
2. Do not detach it from the rest of the exam papers.