



**DHOFAR UNIVERSITY**  
**FOUNDATION PROGRAM | MATH UNIT**  
**FPML 100, FPMS 100, FPMA 100, FPME 100**  
**Math for Law, SW, EDU, and Arabic**  
**Model Paper Midterm EXAM**  
**Term (2023-24)**

<b>Student Name</b>									
<b>Student ID</b>									<b>Date:</b>
<b>Section</b>								<b>Duration: 1 hour 15 minutes</b>	
<b>Teachers</b>									

**Instructions:**

- 1) The exam has 4 main questions with a scratch sheet.
- 2) Please turn off your mobile phone.
- 3) Use only a blue or black pen.
- 4) No talking, passing objects or looking in the direction of another student's paper. Any of these behaviors will be considered cheating.

Dhofar University's Academic Integrity Policy (Policy No. DU-AC-007) 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 reading this pledge, I affirm that I have upheld the AIP and that my submitted work is my own and therefore free of any form of cheating.

تهدف سياسة النزاهة الأكاديمية بجامعة ظفار (السياسة رقم DU-AC-007) إلى تعزيز العمل الجاد والأمانة والمسؤولية و تحظر تمامًا جميع الأشكال التي تخالف النزاهة الأكاديمية ، بما في ذلك الغش والتواطؤ والسرقة الأدبية والانتحال.

من خلال قراءتي لهذا التعهد أؤكد أنني ملتزم بسياسة النزاهة الأكاديمية و أن عملي هذا هو خاص بي ويخلو من أي شكل من أشكال الغش.

Student's Signature: \_\_\_\_\_

**Marking Grid**

	Question 1	Question 2	Question 3	Question 4	Total / 30 marks
<b>Question</b>	MCQ's (out of 10)	(out of 8)	(out of 6)	(out of 6)	
<b>Marks obtained</b>					

Marker's name:		Moderator's name:	
Marker's signature:		Moderator's signature:	
Date:		Date:	

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

1)	The number $\pi$ is in:  (a) Whole Number (W)      (b) Natural Number (N)      (c) Rational (Q)      (d) Real Number (R)
2)	Integer numbers (I) are subset ( $\subseteq$ ) of  (a) Natural number (N)      (b) Real number (R)      (c) Irrational numbers (H)      (d) Whole number (W)
3)	$(\frac{2}{6}) - (\frac{1}{3}) =$  (a) $\frac{1}{12}$ (b) $\frac{1}{6}$ (c) $\frac{-1}{6}$ (d) 0
4)	$(\frac{2}{5})(-\frac{5}{3}) =$  (a) $\frac{2}{3}$ (b) $-\frac{2}{3}$ (c) $-\frac{3}{15}$ (d) $\frac{10}{15}$
5)	Identify the property illustrated by the statement: $(2)(3) = (3)(2)$  (a) Commutative with addition      (b) Commutative with multiplication      (c) Associative      (d) None
6)	Identify the property illustrated by the statement: $(10 + 8) + 1 = 1 + (10 + 8)$ (a) Associative with addition      (b) Associative with multiplication      (c) Commutative      (d) Identity
7)	5 cm is equal to-----mm  a) 50      b) 5      c) 0.5      d) 500
8)	900cm is equal to----- dm  a) 900      b) 9      c) 90      d) 9000
9)	The degree of the polynomial $x^4y^2 - x^4 + 7x^2$ is:  (a) 6      (b) 12      (c) 4      (d) 2
10)	The type of polynomial $5x^3yz - 7$ is:  (a) Binomial      (b) Monomial      (c) Trinomial      (d) None of these

**Question 2:** Perform the indicated operations: (8 marks)(a) **Add** the following polynomials:

1)  $(8m^2 - 5m) + (4m^2 - 2m)$  (2 marks)

2)  $(2n^2 - 3n + 9) + (5n^2 - n + 1)$  (2 marks)

(b) **Subtract** the following polynomials:

1)  $(2n^2 - 9) - (5n^2 - 1)$  (2 marks)

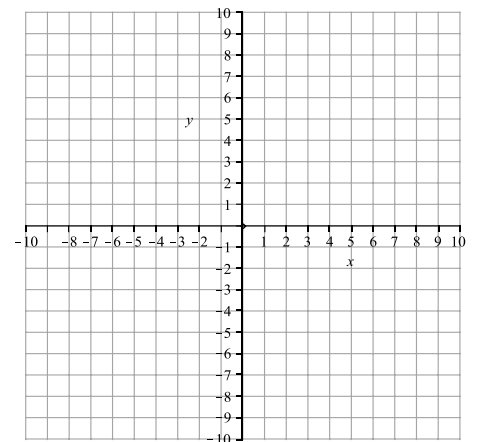
2)  $(8m^2 - 5m + 12) - (4m^2 - 2m + 6)$  (2 marks)

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**Question 3:** Graph the given straight line using intercepts

(6 Marks)

$$2x + 2y = 4$$



**Question 4:**

**(6 Marks)**

- a) Find the slope of a line passes through  $(0, -3)$  and  $(2, -3)$ . (3 Marks)

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- b) Find the distance between the points  $(-1, 2)$  and  $(-1, 7)$ . (3 Marks)

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**End of Mid Exam – Model Paper**

## SCRATCH SHEET

Name: \_\_\_\_\_

Note:

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