



Centre of Preparatory Studies (CPS)

Math Section

Math Pre Level (FPM 100)

Midterm Exam (Model Paper)

Term 1 Fall, 2024-25

Student Name								
Student ID								Date: 15/10/2024
Section								Duration: 1 hour – 15 minutes
Instructor/s	Mohammed Siddique, Tareq Mefleh Al khshpan, Waqar Ahmad Khan, Wesam Al Karadsheh, Amal AlShanfari, Soniyamol Vazhemaliyil							

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 and/or 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 والانتحال. بالتوقيع أدناه ، أوافق على الالتزام بسياسة النزاهة الأكاديمية.

Signature of the student _____

Marking Grid									
Question 1		10	Question 2		10	Question 3		10	
Total									30

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

Question 1: Circle the correct answer.

(10 Marks)

1. Find the sum or difference, and write in the lowest terms, if necessary. $\frac{2}{5} + \frac{1}{5}$
A. $\frac{3}{5}$ B. $\frac{5}{3}$ C. $\frac{2}{25}$ D. $\frac{25}{2}$
2. Find the product, and write in the lowest terms, if necessary. $\frac{3}{5} \cdot \frac{5}{4}$
A. $\frac{3}{4}$ B. $\frac{4}{3}$ C. $\frac{8}{9}$ D. $\frac{12}{25}$
3. Find the product, and write in the lowest terms, if necessary. $\frac{5}{9} \div \frac{2}{9}$
A. $\frac{2}{5}$ B. $\frac{5}{2}$ C. $\frac{7}{18}$ D. $\frac{10}{81}$
4. State the property of real numbers, that is being illustrated. $x + y = y + x$
A. associative B. commutative C. distributive D. identity
5. State the property of real numbers, that is being illustrated. $2 \cdot 1 = 2$
A. commutative B. associative C. distributive D. identity
6. Identify the type and degree of the polynomial: $8x^2y^3$
A. Trinomial, degree:8 B. Binomial, degree:5 C. Monomial, degree:8 D. Monomial, degree:5
7. Combine between like terms: $6x + 2y + 2x + 3y$
A. $6x + 12y$ B. $12x + 6y$ C. $5x + 8y$ D. $8x + 5y$
8. Find the product: $(x^2)(3x^4 - 5x)$
A. $3x^4 - 5x^3$ B. $3x^6 - 5x^2$ C. $3x^6 - 5x^3$ D. $3x^8 - 5x^2$
9. Factor out the common factor: $2y^2 + 8y$
A. $2y(y^2 + 4)$ B. $2y(y + 4y)$ C. $2y(y + 4)$ D. $2(y + 4)$
10. Factor the expression completely: $x^2 - 25$
A. $(x + 5)(x + 5)$ B. $(x + 5)(x - 5)$ C. $(x - 5)(x - 5)$ D. $(x + 25)(x - 25)$

Question 2: Simplify each expression.

(10 Marks)

A. $(7y^5 - 9y) + (3y^5 + 3y)$	(2 marks)
B. $(7x^2 - 8) - (-2x^2 - 6)$	(2 marks)
C. $5x^3 y^2(2x^4 y^5 - 3xy)$	(3 marks)
D. $(3x + 4)^2$	(3 marks)

Question 3: Factor each expression completely

(10 Marks)

A. Factor out the common factor: $10x^8y^2 - 20x^3y^9$	(2 marks)
B. Factor by grouping method: $y^2 + 2y + 6y + 12$	(3 marks)
C. Factor by difference of two squares method: $36x^2 - 9y^2$	(2 marks)
D. Factor using the trinomial factoring method: $y^2 - 8y + 15$	(3 marks)

End of Midterm 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.