S1 Mathematics

First Term 2nd Uniform Test 2025 – 2026

Time Allowed: 30 minutes

Name : _____ · (   )   Class : 1 ____   Marks :_____ / 30

Attempt ALL questions. Unless otherwise specified, all working must be clearly shown.

Section A: Conventional Questions (20 marks)

1. (a) Arrange the terms of the polynomial $5x^4 + 2x^6 - 7 - 3x^2 + x$ in ascending powers of x.

   (b) Arrange the terms of the polynomial $2y^3 - y^5 - 3 + y + 6y^6$ in descending powers of y.

   (2 marks)

_____

_____

_____

_____

2. Simplify the following expressions.

   (a) $y^5(y^7) \div (y^2)$

   (b) $\dfrac{-12a^{12}b^2}{8a^4b^5}$

   (3 marks)

_____

_____

_____

_____

_____

_____

_____

_____

_____
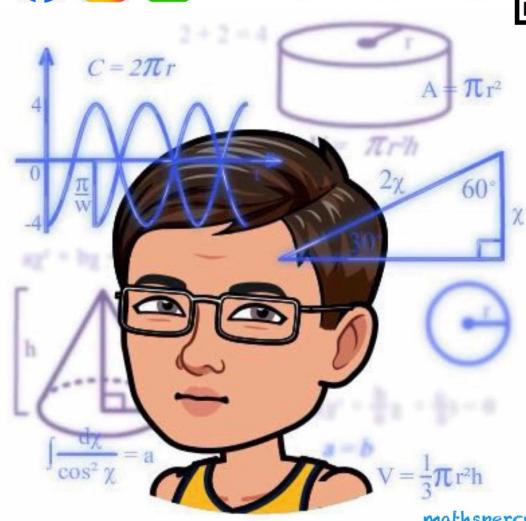
3. Complete the following table. (4 marks)

Polynomial	Number of terms	Coefficient of			Constant term	Degree of polynomial
		x^3	x^2	x		
$5x^3 + 7x^2 - 3x + 2$						

4. Solve the following equations.

(a) $21 - 5x = 3x + 5$

(b) $\dfrac{7}{2}(x-3)+1=8$

(5 marks)

5. Simplify $\dfrac{-3x^3y^2}{2xy^5} \div \dfrac{6x^7}{15y^8}$. (3 marks)

6. The total number of students in the school choir is 63. If the number of female students is less than twice the number of male students by 6, find the number of male students in the school choir.　　(3 marks)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Section B: Multiple-choice Questions (10 marks)

Each question carries 2 marks. 2 marks will be deducted for any un-answered question. Write your answers in the boxes provided.

7	8	9	10	11

7. $(-x)^2 =$

    A.　$-2x$.

    B.　$2x$.

    C.　$-x^2$.

    D.　x^2.

8. The degree of the monomial $-5x^3y^2z$ is

    A.　-5.

    B.　3.

    C.　5.

    D.　6.

9. Which of the following is a polynomial?

   I. $8x^3 - \dfrac{1}{4}$

   II. $8x^3 - \dfrac{4}{x^2}$

   III. $8x^3 - \dfrac{x^2}{4} + 2x + 6$

       A.   I and II only

       B.   I and III only

       C.   II and III only

       D.   I, II and III

10. Joseph solved the equation $\dfrac{7x-(1+4x)}{6} = -2$ as follows:

1st line	$7x-(1+4x)=-12$
2nd line	$7x-1+4x=-12$
3rd line	$11x-1=-12$
4th line	$11x = -11$
5th line	$x=-1$

   Determine on which line Joseph first made a mistake.

       A.   1st line

       B.   2nd line

       C.   3rd line

       D.   4th line

11. Solve the equation $\dfrac{x-2}{3} - 2 = \dfrac{3x}{5}$.

       A. $x = -10$

       B. $x = -8$

       C. $x = -3$

       D. $x = 10$

End of Paper