



INDIAN SCHOOL SALALAH

ACADEMIC YEAR 2026 – 2027



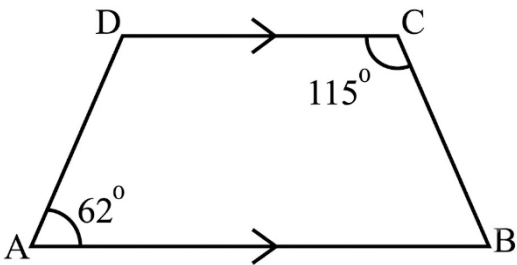
Roll No:					Assessment Type: FIRST TERM EXAMINATION SEPTEMBER - 2026
Grade: VIII					Max. Marks: 80
Subject: Mathematics					
Date of Assessment: 21/09/2026					Time: 3 Hours

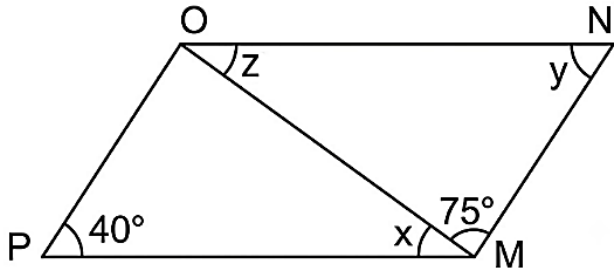
General Instructions:

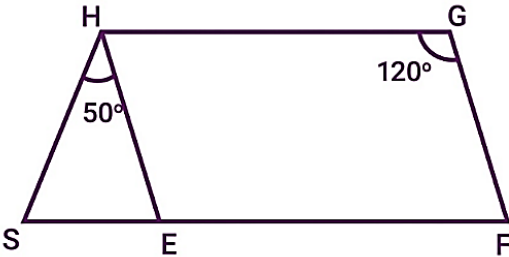
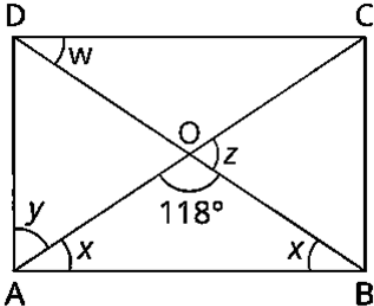
- The Question Paper has 5 Sections A, B, C, D and E.
- Section A has 10 MCQs carrying 01 mark each.
- Section B has 7 questions carrying 02 marks each.
- Section C has 8 questions carrying 03 marks each.
- Section D has 7 questions carrying 04 marks each.
- Section E has a case study question carrying 04 marks.
- There is no overall choice. However, an internal choice has been provided in two questions in Section C and two questions in Section D.
- All Questions are compulsory.

S.No	SECTION - A	Marks
1.	Which of the following is a cube number? a) 100 b) 1,000 c) 10,000 d) 1,00,000	1
2.	The exponential form of $2 \times 2 \times 2 \times m \times m \times m$ is: a) $4m^3$ b) $2m^3$ c) $(2m)^3$ d) $8m$	1
3.	The sum of all angles in any quadrilateral is _____ a) 90° b) 180° c) 360° d) 540°	1
4	If a number is divisible by both 9 and 4, then it must be divisible by a) 18 b) 12 c) 36 d) 24	1

5.	A treasure map shows an 8-digit number with a digital root of 9. To unlock the treasure, you must add 10 to the number. What is the digital root of the new number? a) 1 b) 9 c) 10 d) 19	1
6	Which among the following is the correct expansion of the identity $(a - b)^2$? a) $a^2 - b^2$ b) $a^2 + b^2 - 2ab$ c) $a^2 + b^2 + 2ab$ d) $a^2 + b^2$	1
7.	A student states that the sum of the first n consecutive odd numbers is 121. Based on this statement, find the value of n. a) 10 b) 11 c) 12 d) 13	1
8.	The expression for 5 more than the square of m is: a) $(m + 5)$ b) $(m + 5)^2$ c) $(m^2 + 5)$ d) $(m^2 - 5)$	1
9.	Assertion (A): The value of $(-1)^{500}$ is 1. Reason (R): When a negative number is raised to an even power, the result is positive. a) Both A and R are true, and R is the correct explanation of A. b) Both A and R are true, but R is not the correct explanation of A. c) A is true but R is false. d) A is false but R is true.	1
10	Assertion (A): A kite has one pair of opposite angles equal. Reason (R): Adjacent sides of a kite are unequal. a) Both A and R are true, and R is the correct explanation of A. b) Both A and R are true, but R is not the correct explanation of A. c) A is true but R is false. d) A is false but R is true.	1

	SECTION - B	
11	Express 2704 as the product of powers of prime factors.	2
12	If $31k2$ is divisible by 3, then list all the possible values of k .	2
13	Observe the following pattern and find the missing numbers. $2^2 + 4^2 + 4^2 = 6^2$ $4^2 + 6^2 + 12^2 = 14^2$ $6^2 + 8^2 + 24^2 = 26^2$ $8^2 + 10^2 + 40^2 = 42^2$ $\text{-----} + \text{-----} + \text{-----} = \text{-----}$	2
14	Find the product using the distributive property: 318×1004	2
15	a) Express 345000000000 in standard form. b) Simplify and write the answer in exponential form: $8^5 \times 8^{-4} \times 8^2$	2
16	Find the smallest and the greatest 4 – digit number that is divisible by 9.	2
17.	If ABCD is a trapezium and $AB \parallel CD$, $\angle DAB = 62^\circ$ and $\angle DCB = 115^\circ$, find the measures of $\angle ADC$ and $\angle ABC$. 	2
	SECTION - C	
18	Find the smallest number, by which 2352 must be multiplied so that the product is a perfect square. Find the square root of the square number obtained.	3
19	Expand and simplify the expression: $6(x - 1) + 3(x + 4) - 5x$	3
20	Using diagonal properties, construct a parallelogram whose diagonals are 8 cm and 5 cm and intersect at an angle of 60° .	3

21	a) Find the value of the letters in the following Cryptarithm. $ \begin{array}{r} P \quad Q \\ \times \quad 6 \\ \hline Q \quad Q \quad Q \end{array} $ b) What is the digital root of 54789?	3
22	a) i) A robot generates 4-character passwords using digits and letters. How many passwords can be formed? Write the answer in exponential form. ii) If $15^2 = 225$, what is the value of $(0.15)^2$? OR b) If $5^a = 25$ and $3^b = 9^2$, then find the value of $3a + b$.	3
23	Find the cube root of 15625 by the prime factorization method.	3
24	Determine whether the statements below are 'Always True', 'sometimes true, or 'Never True'. a) The product of two multiples of 5 is a multiple of 10. b) The sum of three consecutive integers is divisible by 3. c) If $abcdef$ is a multiple of 9, then $fedcba$ is also a multiple of 9.	3
25	a) Find the values of unknowns x, y and z in the parallelogram PMNO.  OR	3

	b) In the given figure, EFGH is a parallelogram, $\angle FGH = 120^\circ$ and FE is extended to point S, such that $\angle SHE = 50^\circ$. Find $\angle EFG$, $\angle HES$ and $\angle ESH$. 	
	SECTION - D	
26	a) How many natural numbers lie between 36^2 and 37^2? b) What is the value of $\left(\frac{3}{5}\right)^3$? c) The squares of which of the following would-be odd numbers? i) 431 ii) 282 iii) 400 iv) 537	4
27	Construct a kite whose diagonals are 6 cm and 8 cm.	4
28	Expand the following: a) $(10a + b)(9c + d)$ b) $3a(a - b + \frac{1}{2})$	4
29	a) Without dividing, determine whether the number 567850 is divisible by 2, by 5 and by 11(Using divisibility rules). Give reason. OR b) What will be the digital root of the number $45p + 27q + 38$?	4
30	Find the measures of x, y, z and w in the rectangle ABCD. 	4
31	Compute the products using the suggested identity. a) 197×203 using identity $(a + b)(a - b)$ b) $(3x + 5y)^2$ using identity $(a + b)^2$	4

	OR Prove that $(m + n)^2 - 4mn = (n - m)^2$	
32	Use the power line for 5 to answer the following questions. 5⁷ 5⁶ 5⁵ 5⁴ 5³ 5² 5¹ 5⁰ 5⁻¹ 5⁻² 5⁻³ 78125 15625 3125 625 125 25 5 1 $\frac{1}{5}$? ? a) 3125×25 b) $15625 \div 125$ c) $625 \times \frac{1}{5}$ d) Find the value of 5^{-2}	4
	SECTION – E (Case Study)	
33	A school plans to create a square shaped eco – park with a total area of 324m².  a) What is the length of each side of the park? b) Students decided to plant trees by dividing entire park into equal square beds, each with a side length of 3m. What is the area of each square bed? c) Find how many such square beds can be made. d) A student claims, "If a number is a perfect square, all the powers of its prime factors are even." Is the statement true? Give an example to support your answer.	1 1 1 1
