Roll No. | | | | | |

INDIAN SCHOOL SALALAH

SECOND TERM EXAMINATION – FEB – MARCH 2026

Class: VII **MATHEMATICS (041)** **Date: 01/03/2026**

Time: 3 hours **Maximum Marks: 80**

General Instructions:

a) All questions are compulsory.

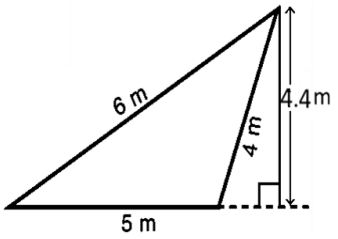
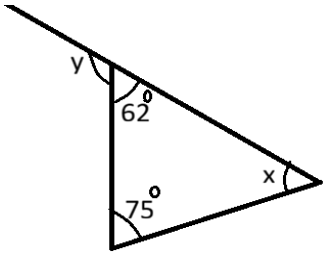
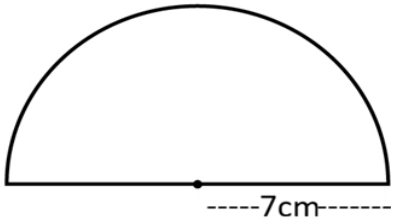
b) This question paper consists of 30 questions divided into 5 sections.

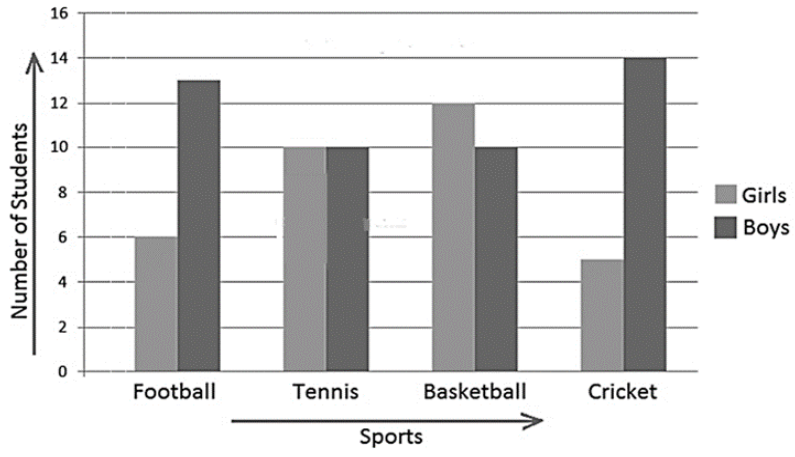
c) Section A contains 6 questions (MCQs) of 1 mark each. Section B contains 6 questions of 2 marks each.

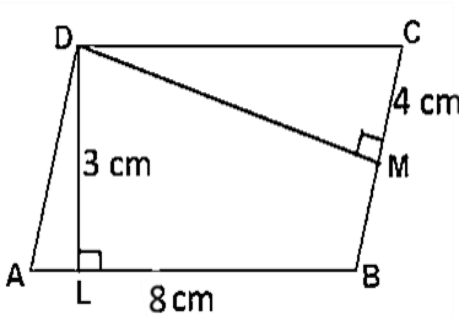
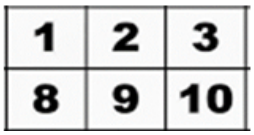
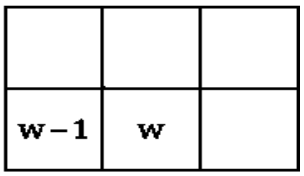
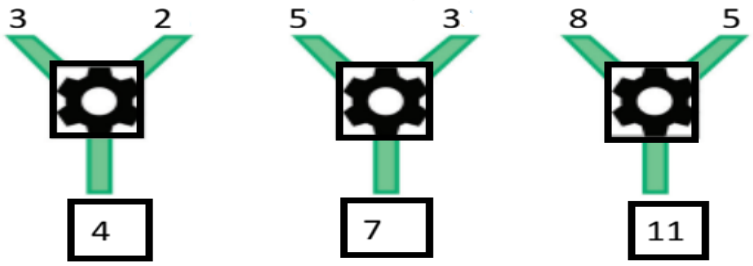
Section C contains 10 questions of 3 marks each. Section D contains 7 questions of 4 marks each and section E contains one case study question of 4 marks.

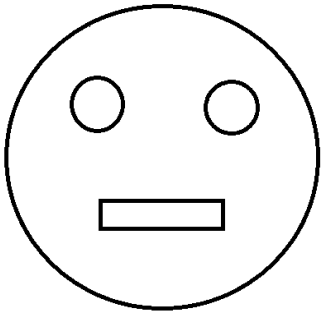
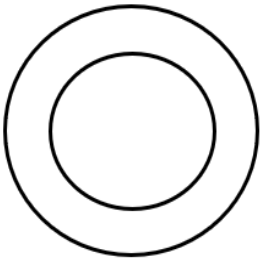
d) Internal choices have been provided in Section C and Section D. You have to attempt only one of the choices in such questions.

NO	SECTION A	MARKS
1	If x, y and z are taken as the three sides of a triangle, under what condition does the triangle exist? a) $x + y = z$ b) $x + y < z$ c) $x + y > z$ d) $x - y > z$	1
2	The sum of 3 odd numbers and 2 even numbers will always be: a) even b) odd c) prime d) unknown	1
3	The median of the distribution 11, 9, 8, 13, 10, 13, 15 is a) 15 b) 13 c) 11 d) 8	1
4	What is the area of a circle of diameter d? a) $\frac{1}{4}\pi\ d^2$ b) $2\ \pi\ d^2$ c)) $\pi\ d^2$ d) $2\ \pi$ d	1

5	The algebraic expression for "4 less than 10 times a number p" is: a) $4 - 10\ p$ b) $4(p - 10)$ c) $10\ p - 4$ d) $4\ p - 10$	1
6	Find the area of the given triangle.  a) 15 m^2 b) $11m^2$ c) 10 m^2 d) $12m^2$	1
	SECTION B	
7	In the given figure find the measures of x and y.  	2
8	a) State whether True or False. The mean is always one of the numbers in a data. b) Find the mean of all single digit natural numbers.	2
9	Find the perimeter of the given semicircle including its diameter (Use $\pi = 22/7$)  	2
10	Find the value of the expression $3u - 5v + 2$ when $u = 4$ and $v = -1$.	2
11	What is the 44th odd number in the sequence 1, 3, 5, 7, -------?	2
12	a) State angle sum property of a triangle. b) In Δ DEF, if ∠F = 122° and ∠E = 32°, what is the measure of ∠D?	2
	SECTION C	
13	Find the third angle of a triangle using a parallel line when two of the angles are 120° and 25°.	3

14	i) Write the formula to find: a) the n^{th} even number b) the n^{th} odd number ii) Find the parity of the following differences. Give an example for each: a) odd − odd b) even − odd	3
15	a) The circumference of a circle is 308 cm. Find its area. (Use $\pi = 22/7$) **OR** b) The radius of a circle is 4.2 cm. Find its circumference and area. (Use $\pi = 22/7$)	3
16	The number of points scored by Bismi Club in eight matches are 22, 15, 20, 35, 10, 44, 18, 36. a) Find out the range of the number of points scored. b) Find the mean score.	3
17	a) A shopkeeper sells x kg of sugar at ₹30 per kg and y kg of rice at ₹35 per kg. He spent ₹70 on transport. Write an algebraic expression for his total cost. b) Add the following expressions: $4d - 7c + 5 \; and \; -5d + 10c + 12$ c) Are the expressions 8y−5 and 8(y−5) equal? Justify your answer.	3
18	The given double bar graph shows the number of boys and girls participating in different sports such as Football, Tennis, Basketball, and Cricket.  Observe the graph carefully and answer the following questions. a) How many girls participated in Basketball? b) Which sport has the highest number of boys? c) What is the total number of students (boys and girls together) who participated in Tennis?	3

19	Two sides of the parallelogram ABCD are 8cm and 4 cm. The height corresponding to the base AB is 3 cm. Find a) area of the parallelogram b) the height corresponding to the base BC. 	3
20	Create a magic square using the numbers 3 – 11. Draw a second magic square by doubling each number in this magic square. a) Is the resulting grid also a magic square? b) How do the magic sum change in this case?	3
21	a) In a calendar month, if a 2 × 3 grid full of dates is chosen as shown in the picture, write the expressions for the dates in the blank cells if the bottom middle cell has date w.    b) Find out the formula of this number machine. 	3
22	a) State whether a triangle exist or not if the measures are 12cm, 11cm and 24cm. Why or why not? b) Between which two measures the length of the third side of a triangle lies if two of its sides are 8cm and 13 cm?	3

	SECTION D	
23	Two consecutive numbers in the Virahanka sequence are 377 and 610. a) What are the next two numbers in the sequence? b) What are the previous two numbers in the sequence? c) What is the parity of the 30^{th} term of the Virahanka sequence? Give an explanation.	4
24	a) Subtract the given expression, $10\,x\, +\, 2y - 15$ from $15x\, -4y\, +8$ b) Observe the given expression, is there a mistake? If so, explain the mistake, and what is the correct value of the expression? If $p\, =\, 5\,, q\, =\, 4$ then $p - (\,q - 7) \,=\, 2.$	4
25	Anita is making a face mask using coloured card sheet for her Art project. From a circular card sheet of radius 14 cm, she removed two circles of radius 2.1 cm and a rectangle of length 3 cm and breadth 1cm as shown in the figure. a) Find the area of the sheet removed. b) Find the area of the remaining sheet. (Use $\pi = 22/7$) 	4
26	Construct a triangle PQR with QR = 5 cm, PQ = 7 cm, ∠ Q = 60°. Construct an altitude from P to QR.	4
27	a) Bibinlal has a flexible string of length 132 cm, which can be bent into different shapes. (Use $\pi = 22/7$) i) If the string is bent to form a square, find the area of the square. ii) When the same string is bent to form a circle, find the radius of the circle. **OR** b) From a circular sheet of radius 7cm, a circle of radius 3.5 cm is removed. Find the area of the remaining sheet. (Use $\pi = 22/7$) 	4
28	The following table shows the information collected from a survey conducted among high school students regarding the type of TV shows they watch. Represent the given data using a bar graph.	4

TV shows	Sports	Reality shows	Quiz	Movies	Mini series	Comedy shows
No. of students	40	25	15	35	30	20

	a) Which type of TV show is watched by the maximum number of students? b) How many more students watch Sports than Quiz?	
29	i) Write the parity of a) sum of an odd number of even numbers. b) sum of an even number of odd numbers. ii) Is it true that all even numbers can be expressed as 6j − 4? Justify your answer. iii) Solve this cryptarithm: $\begin{array}{r} BB \\ +A \\ \hline ACC \end{array}$	4
	SECTION E **Case-study based question. Read the following passage and answer the questions given below:**	
30	Charu, Krishita, and Aarav are enthusiastic participants in a quiz competition consisting of three rounds.  • In the competition: Each correct answer earns p points. • Each incorrect answer results in a deduction of q points. Charu's scores in the three rounds are represented by the expressions, $9p - 4q,\ 7p - 6q, and\ 8p - 3q.$ Krishita's total score after all three rounds is simplified as $35p - 9q$. Aarav's scores in the three rounds are $9p - 3q, 7p - 2q,$ and $5p - q$. a) What is Charu's total score after three rounds? Simplify the expressions. b) Find Aarav's total score after three rounds. Simplify the expressions. c) If the value of p is 5 and q is 2, compare Aarav's total score with Charu's total score. Who scored higher?	1 1 2

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