

## INDIAN SCHOOL SALALAH



**MATHEMATICS** 



**Class: VII** 

Time: 3 hours Maximum Marks: 80

## **General Instructions:**

- a) All questions are compulsory.
- b) This question paper consists of 30 questions divided into 4 sections. Section A contains 6 questions 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 8 questions of 4 marks each.

NO	SECTION A	MARKS
1	Classify the given triangle on the basis of sides and angles.  M  N  3 cm  L	1
2	Simplify: $2^3 \times 5$ .	1
3	Find the circumference of circle with the radius 14 cm.	1
4	Write algebraic expression for the following statement: 'Product of numbers x and y added to 10'.	1
5	Find 20 % of 2000.	1
6	The heights of 10 girls were measured in cm and the results are as follows: 135, 150, 139, 128, 151, 132, 146, 149, 143, 141 Find the range.	1
	SECTION B	
7	Find the value of $x$ .  A $45^{\circ}$ B  C	2
8	Identify the greater number: 2 <sup>5</sup> or 5 <sup>2</sup> . Justify your answer.	2

9	A gardener wants to fence his circular garden with diameter 21 m. What is the	2
	length of fence required for two rounds of fencing?	
10	Find the values of the following expressions for $m = 2$ .	2
	a) $m + 11$ b) $5 - m^2$	
11	Convert the following into per cent.	2
	a) $\frac{2}{5}$ b) 0.25	
12	Find the mean of first five whole numbers.	2
	SECTION C	
13	Find the value of x and y	3
14	<ul> <li>a) Express the following numbers in standard form.</li> <li>i) 37800000 ii) 3205.5</li> <li>b) Find the number from the given expanded form.</li> <li>5 × 10<sup>4</sup> + 7 × 10<sup>3</sup> + 9 × 10<sup>2</sup> + 3 × 10<sup>0</sup>.</li> </ul>	3
15	$\triangle$ ABC is an isosceles triangle with AB = AC = 7.5 cm and BC = 9 cm. The height AD from A to BC is 6cm. Find the area of $\triangle$ ABC. What will be height from C to AB.  7.5 cm  6 cm  7.5 cm  C	3
16	Find the sum of $54ab + 21a^2 - 4b^2$ and $7b^2 + 9a^2 - 45ab$ .	3
17	Suresh purchased a sports kit for ₹ 5000 and sold it for ₹ 6500. Find his profit or loss percent.	3

18	In a class test, the marks (Out of 10) of 31 students were	3
	5,3,6,5,5,4,1,3,8,4,3,6,5,4,8,2,5,4,4,4,3,7,2,4,5,4,8,9,2,7,4.	
	Find:	
	a) Mode b) Median c) Are they same?	
19	Answer the following.	3
	a) What is the measure of each angle in an equilateral triangle?	
	b) Name the triangle which has two of its sides as its altitudes.	
	c) How many obtuse angles can a triangle have?	
20	A circle of radius 7cm is cut out from a circular sheet of radius 14cm. What is	3
	the area of the remaining sheet (shaded region)?	
21	A dining table costing ₹ 80000 one year ago, now costs ₹ 60000. Find the	3
	percentage increase or decrease in the price.	
22	Study the following graph and answer the following question	3
	a) In which subject student is very good?	
	b) In which subject student required to work hard?	
	c) How many marks student got more in Hindi than Science?	
	<b>↑</b>	
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	English Hindi Math's Science Science	
	Subjects —>	
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	SECTION D	
23	If the diagonals of a rhombus measure 10 cm and 24 cm. Find its perimeter.	4
24	Simplify the following: $\frac{(5^2)^3 \times 4^3 \times 3^2}{25^2 \times (2^2)^2 \times 9}$	4
25	a) In parallelogram ABCD , AB = 15 cm and BC = 10 cm . The height corresponding to the base AB is 6cm. Find the  i) Area of the parallelogram ABCD.  ii) Height DM corresponding to the side BC.	4
	b) What is the measure of exterior angle of a triangle, if two of its interior opposite angles are 45° and 65°?	
26	From the sum of $4 + 3x$ and $5 - 4x + 2x^2$ , subtract the sum of $3x^2 - 5x$ and and $-x^2 + 2x + 5$ .	4
27	<ul> <li>a) Anil bought a second-hand car for ₹ 9000 and sold it to Ramesh with a profit of 10%. Find its selling price and also find how much profit he made in this sale.</li> <li>b) Find the simple interest on ₹ 1500 at 6% per annum for 3 years.</li> </ul>	4
28	The following data gives the production of food grains (in thousand tons) for some years. Draw the bar graph to represent the data graphically.	4
	Year         2017         2018         2019         2020         2021         2022           Production (in thousand tons)         120         150         140         180         170         190	

29	Express $504 \times 729$ as the product of powers of their prime factors.	4
30	a) Classify into monomials, binomials and trinomials.	4
	(i) $75x^5y^2z + 9$ (ii) $4abcd^2$	
	(iii) $2xy^2 + 3x^2y$ (iv) $3x + 4y + 2z$	
	b) Identify the like terms and write them in groups.	
	$2x^3y$ , $12xy^2$ , $-13xy$ , $-15abc$ , $-5yx^3$ , $4yx$ , $-17bac$ , $5xy^2$ .	

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