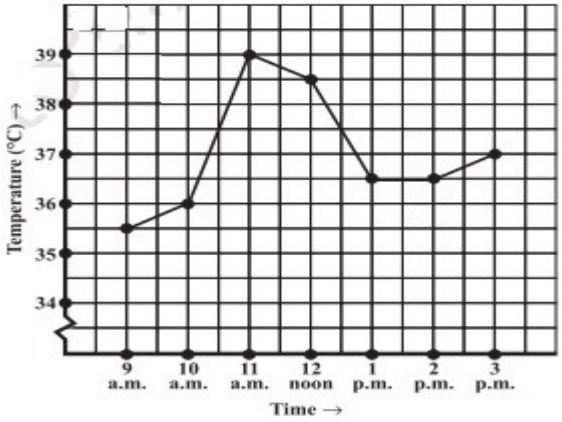
KENDRIYA VIDYALAYA SANGATHAN, RAIPUR REGION
SESSION ENDING EXAM (2024-25)
SUBJECT- MATHEMATICS
CLASS: VIII

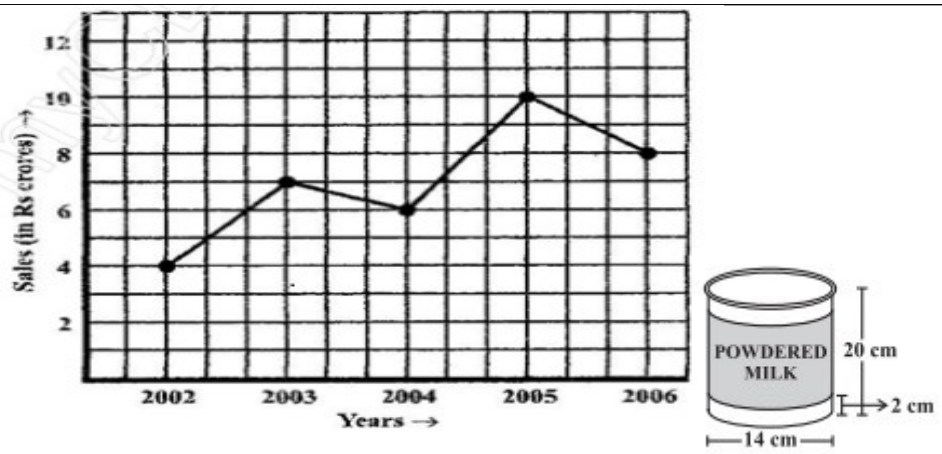
M.M. 60 **Time: 2.30 Hrs.**

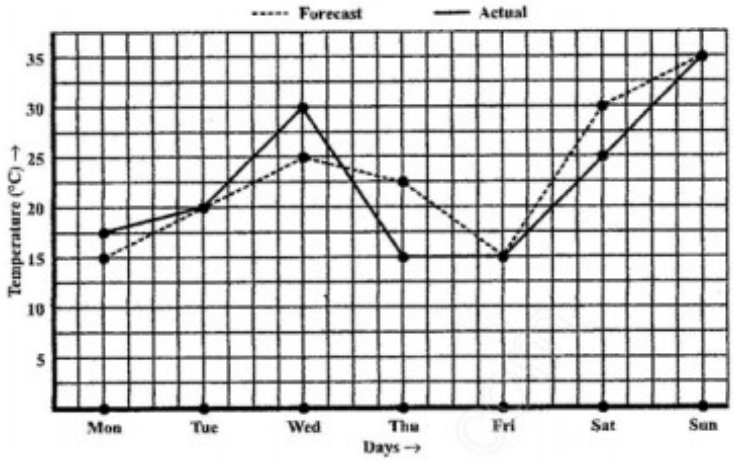
General Instructions:

1. *All the questions are compulsory.*
2. *There are 4 Sections in the Question Paper*
3. *Section A (From Q.1 to Q.15) consists10 MCQ questions and 5 Fill in the blanks questions of 1 mark each.*
4. *Section B (From Q.16 to Q.20) consists 05 very short answer type questions of 2 marks each*
5. *Section C (From Q.21 to Q.25) consists 05 short answer type questions of 3 marks each*
6. *Section D (From Q.26 to Q.30) consists 03long answer type questions and 02case based Questions of 4 marks each.*

Q.NO	SECTION A	MARKS
1	The Product of $a^2 \times 2a^{20} \times b^2$ is (a) $2a^{22} \times b^2$ (b) a^{22} (c) b^2 (d) $2a^{24}b$	1
2	The sum of (p-q),(q-r) and (r-p) is :- (a) (p-q) (b) (q-r) (c) (r-p) (d) 0	1
3	Area of rhombus is (a) $\frac{1}{2} \times b \times h$ (b) $d_1 \times d_2$ (c) $\frac{1}{2} \times d_1 \times d_2$ (d) none of the above	1
4	The value of 7^{-2} is (a) 49 (b) $\frac{1}{49}$ (c) $\frac{1}{2}$ (d) $\frac{1}{7}$	1
5	The standard form of 0.0000085 is (a) 85×10^8 (b) 8.5×10^{-6} (c) 8.5×10^6 (d) 85	1
6	Factorise : 6p-12q (a) p=2q (b) 6(p-2q) (c) p-2q (d) 6(p-3q)	1
7	The solution of $20x^4 \div 10x^2$ is (a) $2x^2$ (b) $-2x^2$ (c) $4x^2$ (d) 2x	1
8	A line graph which is whole unbroken line is called a (a) Linear graph (b) Pie chart (c) Histogram (d) Bar graph	1
9	"The more the money deposited in a bank, more is the interest earned". This is an example of (a)Direct proportion (b) Inverse proportion (c)neither direct nor inverse (d) none of the above	1
10	What is value of *x*, if $\frac{12}{40}$ ¿ $\frac{x}{2500}$ (a) 850 (b) 650 (c) 750 (d) 740	1
	FILL IN THE BLANKS:	
11	1litre =--------cm^3	1
12	$2^5 \times 2^8$ = ----------	1

13	The value of $3^0 \times 4^0 \times 5^0$ = ----------	1
14	*If* $x = k\,y$, then x and y are in ---------- proportion.	1
15	The common factor of $3x \wedge 6x^3$ is---------	1
	SECTION B	
16	Find the product of following:- (a) $4,7\,p(b) - 4p\,,8\,pq$	2
17	Find the side of a cube whose total surface area is 600 cm^2.	2
18	Find the value of $2^{-2} + 3^{-2} + 4^{-2}$	2
19	Factorise: $x^2 + 8x + 16$	2
20	The following graph shows the temperature of a patient in a hospital, recorded every hour. (a) What was the patient's temperature at 1 p.m.? (b) The patient's temperature was the same two times during the period given. What were these two times? 	2
	SECTION C	
21	Subtract : $3\,pq(p-q)$ from $2\,pq(p+q)$	3
22	The diagonals of a rhombus are 7.5 cm and 12 cm. Find its area.	3
23	Find the value of m, if $(-3)^{m+1} \times (-3)^5 = (-3)^7$	3
24	A machine in a soft drink factory fills 840 bottles in six hours .How many bottles will it fill in 5 hours?	3
25	The following line graph shows the yearly sales figures for manufacturing company.	3

	 (a) What were the sales in (i) 2002 (ii) 2006? (b) What were the sales in (i) 2003 (ii) 2005? (c) Compute the difference between the sales in 2002 and 2006.	
	SECTION D	
26	Simplify:- $(a+b)(c-d)+(a-b)(c+d)+2(ac+bd)$	4
27	There are 100 students in hostel. Food provision for them is for 20 days .How long these provision last, if 25 more students join the group?	4
28	Divide :- $52\,pqr(p+q)(q+r)(r+p) \div 104\,pq(q+r)(r+p)$	4
	CASE BASED QUESTIONS	
29	Once upon a time Radha and her daughter visits to market. She enters in a shop. There are so many things kept in a rack. Suddenly both looks rack of milk powder. A company packages its milk powder in cylindrical container whose base has a diameter of 14 cm and height 20 cm. Company places a label around the surface of the container (as shown in figure). The label is placed 2 cm from top and bottom. (i) What is the formula for finding the Curved Surface Area of a cylinder? (ii) What is the height of the label? (iii) What is the area of the label?	
30	The following graph shows the temperature forecast and the actual temperature for each day of the week.	4



(a) On which days was the forecast temperature the same as the actual temperature?

(b) What was the maximum forecast temperature during the week?

(c) What was the minimum actual temperature during the week?

(d) On which day did the actual temperature differ the most from the forecast temperature?