

**KENDRIYA VIDYALAYA SANGTHAN LUCKNOW REGION**  
**SESSION ENDING RE-EXAM 2023-24**  
**CLASS – VIII SUBJECT – MATHEMATICS**

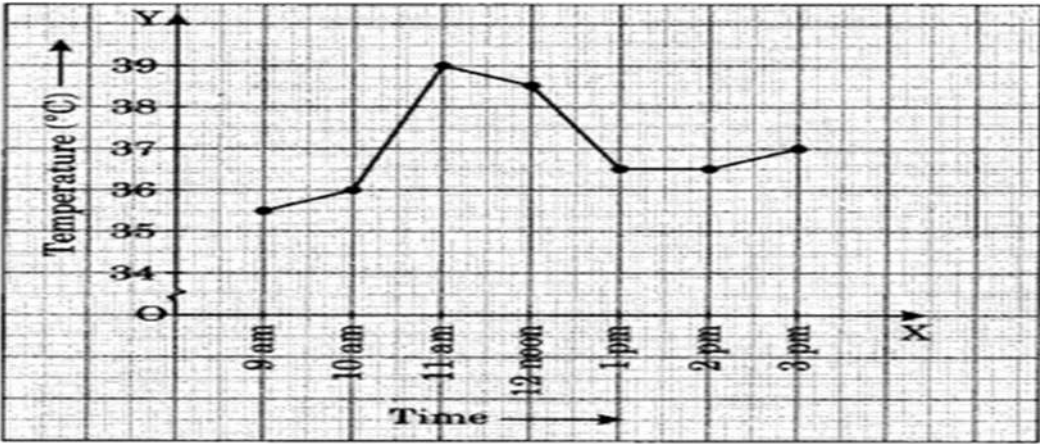
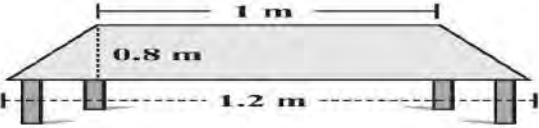
**MAXIMUM MARKS :60**

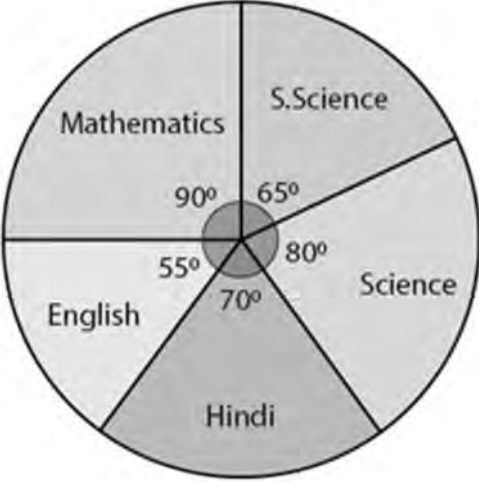

**Time Allowed :2.30 hours**

**General instructions**

- All questions are compulsory.
- This question paper has four sections A, B, C & D.
- Section A has 15 questions MCQ carrying 1 mark each.
- Section B has 5 questions carrying 2 marks each.
- Section C has 5 questions carrying 3 marks each.
- Section D has 5 questions carrying 4 marks each.

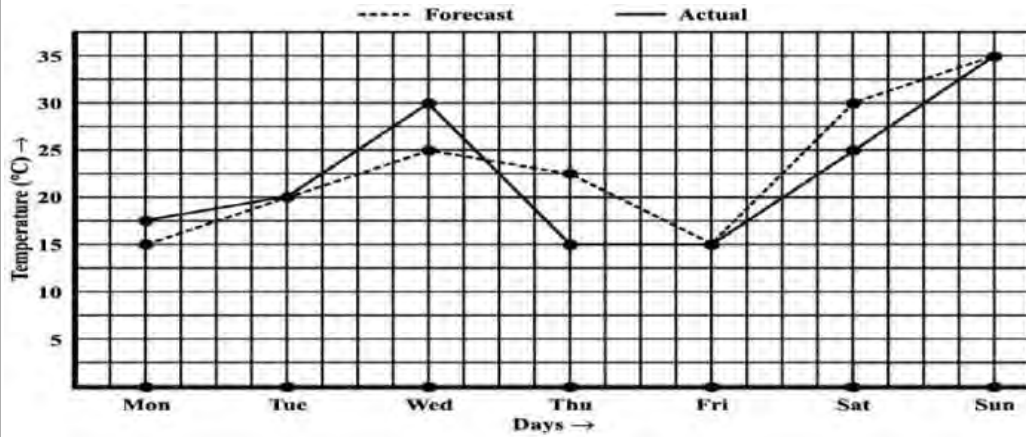
SECTION A		
Q.1	Usual form of $8.62 \times 10^4$ is A) 86200                      B) 8620                      C) 8.620                      D) 86020	1
Q.2	Factors of $t^2+8t+16$ are: A) $(t+4)(t-4)$ B) $(t+4)(t+4)$ C) $(t+4)(4-t)$ D) $(t-4)(t-4)$	1
Q.3	The product of $a+b$ and $a-b$ is A) $2b$ B) $2a$ C) $a^2-b^2$ D) $a+b$	1
Q.4	The square of which of the following number will be an odd number A) 31                      B) 68                      C) 64                      D) 38	1
Q.5	The value of $2^{-4}$ is A) $\frac{1}{2}$ B) $\frac{1}{8}$ C) $\frac{1}{16}$ D) 16	1
Q.6	If two quantities x and y are in direct proportion with each other, then if x decreases - A) y will Increase              B) y will decrease              C) y remains constant              D) None of above	1
Q.7	If edge of a cube is 5 cm then volume is A) $150\text{cm}^3$ B) $50\text{cm}^3$ C) $125\text{cm}^2$ D) $125\text{cm}^3$	1
Q.8	How many natural numbers lie between $13^2$ and $14^2$ . A) 24                      B) 25                      C) 26                      D) 27	1
Q.9	Solve: $8x+4=3(x-1)+7$ A) 1                      B) -1                      C) 0                      D) none of these	1
Q.10	If we subtract $4a-7ab+3b+12$ from $12a-9ab+5b-3$ , then the answer is: A) $8a+2ab+2b+15$ B) $8a+2ab+2b-15$ C) $8a-2ab+2b-15$ D) $8a-2ab-2b-15$	1
Q.11	What is the length of the side of a square whose area is $441\text{cm}^2$ ? A) 22 cm                      B) 20 cm                      C) 21 cm                      D) 11cm	1
Q.12	Add: $5m(3-m)$ and $6m^2-13m$ . A) $2m+m^2$ B) $2m-m^2$ C) $-2m+m^2$ D) $-2m-m^2$	1

Q.13	Charge of an electron is 0.000,000,000,000,000,16 coulomb and in exponential form it can be written as _____. A) $1.6 \times 10^{-18}$ coulomb B) $1.6 \times 10^{-19}$ coulomb C) $1.6 \times 10^{-20}$ coulomb D) $1.6 \times 10^{-21}$ coulomb	1
Q.14	The value of $(2^{-1} - 4^{-1})^{-1}$ A) 1/4 B) 1/8 C) 4 D) 1	1
Q.15	The value of expression $2a^2 + 2b^2 - ab$ for $a=2, b=1$ is? A) 2 B) 8 C) 4 D) 16	1
<b>SECTION B</b>		
Q.16	Find the square root of 1296 OR Find the square root of 2.25	2
Q.17	The above graph shows the temperature of a patient in a hospital, recorded every hour.   (A) What was the patient's temperature at 2 pm? (B) When was the patient's temperature 38.5°C?	2
Q.18	If $(-3)^{m+1} \times (-3)^5 = (-3)^9$ , then the value of m is?	2
Q.19	Solve : $15(y - 4) - 2(y - 9) + 5(y + 6) = 0$	2
Q.20	Find the area of a rhombus whose diagonals are of lengths 16cm and 10.2 cm. OR The shape of the top surface of a table is a trapezium. Find its area if its parallel sides are 1 m and 1.2 m and perpendicular distance between them is 0.8 m.  	2
<b>SECTION C</b>		
Q.21	A machine in a soft drink factory fills 840 bottles in six hours. How many bottles will it fill in five hours?  OR In a modal of a ship, the mast is 9 cm high, while the mast of the equal ship is 12 m high. If the length of the ship is 28 m, how long is the modal ship?	3
Q.22	Solve: $5x - 2(2x - 7) = 2(3x - 1) + \frac{7}{2}$	3
Q.23	The adjoining pie chart gives the marks scored in an examination by a student in Hindi, English, Mathematics, Social Science and Science. If the total marks obtained by the students were 540, answer the following questions.	3

	<p>(i) In which subject did the student score 105 marks?</p> <p>(ii) How many more marks were obtained by the student in Mathematics than in Hindi?</p> <p>(iii) Examine whether the sum of the marks obtained in Social Science and Mathematics is more than that in Science and Hindi.</p> <p>OR</p> <p>If Gopal have a spinning wheel with 4 green sectors, 2 blue sectors and 1 red sector, what is the probability of getting a green sector? What is the probability of getting a non blue sector? What is the probability of a getting a non red sector?</p>														
Q.24	Subtract: $3a(a+b+c) - 2b(a-b+c)$ from $4c(-a+b+c)$		3												
Q.25	A road roller takes 750 complete revolutions to move once over to level a road. Find the area of the road if the Diameter of a road roller is 84 cm and length is 1 m.		3												
<b>SECTION D</b>															
Q.26	<p>(1) A train is moving at a uniform speed of 75 km/hour.</p> <p>(a) How far will it travel in 20 minutes?</p> <p>(b) Find the time required to cover a distance of 250 km.</p> <p>(2) Rashmi has a road map with a scale of 1 cm representing 18 km. She drives on a road for 72 km. What would be her distance covered in the map?</p>		3+1												
Q.27	<p>On a particular day, the sales (in rupees) of different items of a baker's shop are given below. Draw table and pie chart for this data.</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td><b>ordinary bread</b></td><td><b>: 320</b></td></tr> <tr><td><b>fruit bread</b></td><td><b>: 80</b></td></tr> <tr><td><b>cakes and pastries</b></td><td><b>: 160</b></td></tr> <tr><td><b>biscuits</b></td><td><b>: 120</b></td></tr> <tr><td><b>others</b></td><td><b>: 40</b></td></tr> <tr><td><b>Total</b></td><td><b>: 720</b></td></tr> </table>	<b>ordinary bread</b>	<b>: 320</b>	<b>fruit bread</b>	<b>: 80</b>	<b>cakes and pastries</b>	<b>: 160</b>	<b>biscuits</b>	<b>: 120</b>	<b>others</b>	<b>: 40</b>	<b>Total</b>	<b>: 720</b>	2+2
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Q.28	<p>Factorise: (a) <math>x^2 + 6x - 16</math></p> <p>(b) <math>x^4 - (y + z)^4</math></p> <p style="text-align: center;">OR</p> <p>(a) <math>12xy(9x^2 - 16y^2) \div 4xy(3x + 4y)</math></p> <p>(b) <math>p^2 + 6p + 8</math></p>		2+2												

Q.29

In an assignment, students were given the information represented through the graph. This graph shows temperature forecast and the actual temperature for each day of a Week



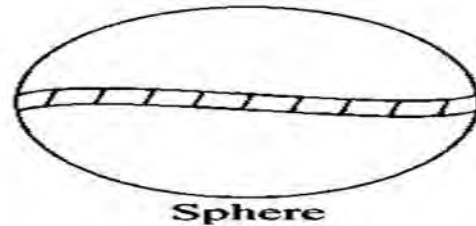
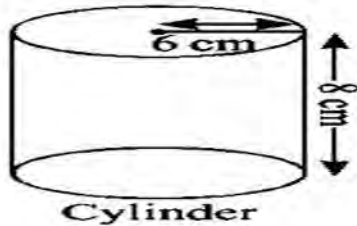
Based on the graph answer the following questions:

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

1  
1  
2

Q.30

Mr. Manoj mathematics teacher bring some Grey coloured clay in the classroom to teach the topic mensuration first he forms a cylinder of radius 6 cm and height 8 cm with the clay then he moles that cylinder into a sphere similarly he moles the sphere in other different shapes answer the following question:



- (i) which of the following is not a 3D shape ?  
 (a) cone      (b) cuboid      (c) rectangle      (d) sphere
- (ii) when clay changes in one shape to another which of the following remains same?  
 (a) volume      (b) area      (c) curved surface area      (d) radius
- (iii) what is the volume of the cylindrical shape?

1  
1  
2

-----THE END-----