

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

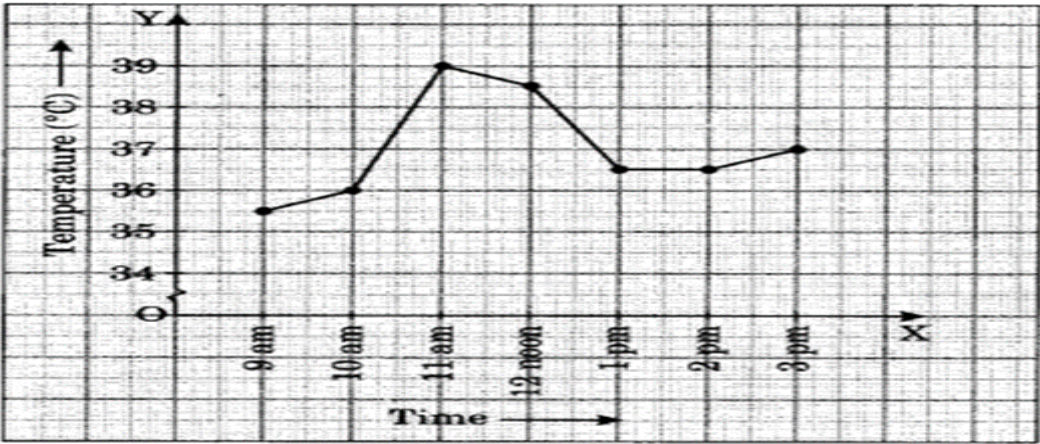
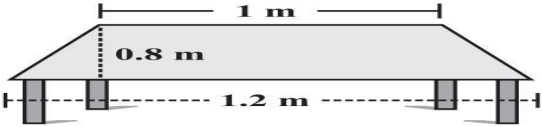
MAXIMUM MARKS :60

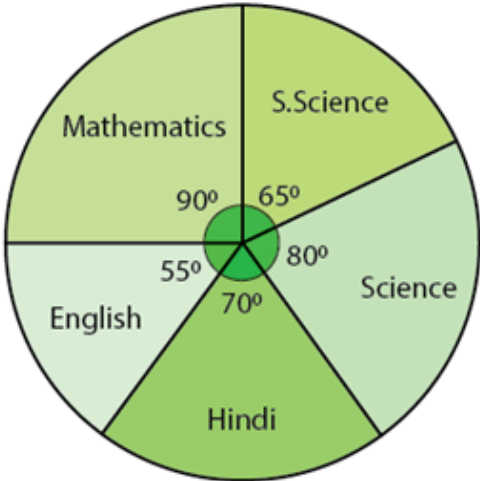
Time Allowed :2.30 hours

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 8.62×10^4 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) 150cm^3 B) 50cm^3 C) 125cm^2 D) 125cm^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 441cm^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 0.000,000,000,000,000,000,16 coulomb and in exponential form it can be written as _____. A) 1.6×10^{-18} coulomb B) 1.6×10^{-19} coulomb C) 1.6×10^{-20} coulomb D) 1.6×10^{-21} coulomb	1
Q.14	The value of $(2^{-1} \cdot 4^{-1})^{-1}$ 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
SECTION 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
SECTION C		
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 (i) In which subject did the student score 105 marks (ii) How many more marks were obtained by the student in Mathematics than in English. (iii) Examine whether the sum of the marks obtained in Mathematics and English is more than that in Science and Hindi. OR 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 getting a non red sector?		3													
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													
SECTION D																
Q.26	(1) A train is moving at a uniform speed of 75 km/hour. (a) How far will it travel in 20 minutes? (b) Find the time required to cover a distance of 250 km. (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?		3+1													
Q.27	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.	<table><tr><td>ordinary bread</td><td>: 320</td></tr><tr><td>fruit bread</td><td>: 80</td></tr><tr><td>cakes and pastries</td><td>: 160</td></tr><tr><td>biscuits</td><td>: 120</td></tr><tr><td>others</td><td>: 40</td></tr><tr><td>Total</td><td>: 720</td></tr></table>	ordinary bread	: 320	fruit bread	: 80	cakes and pastries	: 160	biscuits	: 120	others	: 40	Total	: 720		2+2
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Q.28	Factorise: (a) $x^2 + 6x - 16$ (b) $x^4 - (y + z)^4$ OR (a) $12xy(9x^2 - 16y^2) \div 4xy(3x + 4y)$ (b) $p^2 + 6p + 8$		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 ----- Forecast —— Actual 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: Cylinder Sphere (i) which of the following is not a 3D shape ? (a) cone (b) cuboid (c) rectangle (d) sphere (ii) when clay changes into 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

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