

## Marking Scheme and Learning Outcomes for Class VII Term Test - I (paper 1) 2024 (Mathematics)

Q. No.	Correct Solution	Stepwise Marking	Learning Outcome
1.	0	1 mark for correct answer	Identifies additive identity for given integer
2	$1\frac{1}{5}$	1 mark for correct answer	Understands division of two fractions
3	$180^\circ$	1 mark for correct answer	Defines supplementary angles
4	$49^\circ$ & $25^\circ$	1/2 mark for each correct answer	Understands the complementary angles
5	transversal	1 mark for correct answer	Defines a transversal
6	Binomial	1 mark for correct answer	Recognizes types of polynomial
7	Yes	1 mark for correct answer	Understands solution of a given equation
8	Correct figure of net of a cube	1 mark for drawing correct figure	Uses drawing skill
9	Use of distributive property , correct calculation steps , 500	1/2 mark for distributive property 1 mark for calculation steps, 1/2 mark for answer 500	Understands the concept of distributive property
10	Writing correct pair of sum as -3 and difference as -10	1 mark for each correct pair of integers	Understands addition and subtraction of two integers
11	Correct steps with calculation , $10\frac{1}{2}$ hours with word answer	1/2 mark for each 3 steps and 1/2 mark for last word answer	Understands multiplication of a fraction by a whole number
12	i) 1.68 ii) 4307	1 mark for each correct answer	Understands multiplication of decimal numbers

Q. No.	Correct Solution	Stepwise Marking	Learning Outcome
13	Correct steps with calculation	1 /2 mark for each correct step	Understands multiplication calculation and comparsion
14	Correct steps with calculation , 18 km with word answer	1/2 mark for each 3 correct steps and 1/2 mark for word answer	Applies divisibility rules
15	I) False II) True	1 mark for correct answer	Identifies truth of given statement.
16	I) $\angle DGC = 70^\circ$ II) $\angle DEF = 70^\circ$	1 mark for each correct answer	Applies concept of corresponding angles
17	Writing 5 prime numbers , finds mean= 5.6 and median = 5	$\frac{1}{2}$ mark for writing 5 prime numbers, $1\frac{1}{2}$ mark for finding correct mean and median	Identifies prime numbers and applies mean and median concept
18	Simplifies expression as $8x - 1$ and finding value as 15	1 mark for simplifying expression and 1 mark for answer 15	Applies addition of like terms and finds value of the expression
19	correct steps with calculation , last answer $p = 5$ OR correct steps with calculation , last answer $m = 3/2$	1/2 mark each for 3 steps and 1/2 mark for $p = 5$ OR 1/2 mark each for 3 steps and 1/2 mark for $m = 3/2$	Applies appropriate method of solving equation
20	I) Correct figure of net of cylinder II) Correct figure of net of cone OR I) Correct figure of front view II) Correct figure of side view	1 mark for drawing each correct figure	Applies drawing skill using concept

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21	Simplifies expression as $2a^2 + ab + 3$ and finding value as 33	2 mark for simplifying expression stepwise and finding value 33 stepwise	Applies addition of like terms and finds value of the expression
22	Use of variable for unknown number , making equation as $3x + 2 = 77$ , solving equation stepwise and finds answer as 25	1 /2 mark for use of variable , 1 mark for making equation $3x + 2 = 77$ , $2\frac{1}{2}$ mark solving stepwise and writing word answer.	Applies the concept of making equation and solves using method
23(i)	b) 10	1 mark for correct answer	Applies addition of integers
23(ii)	d) 16	1 mark for correct answer	Applies addition of integers
23(iii)	a) 7	1 mark for correct answer	Applies addition of integers
23(iv)	c ) 0	1 mark for correct answer	Applies addition of integers
23(v)	c ) B	1 mark for correct answer	Recognizes comparison of integers
24(i)	b) Rs. 10	1 mark for correct answer	Identifies each share amount
24(ii)	c) Ashish	1 mark for correct answer	Identifies comparison of parts
24(iii)	a) Rs. 30	1 mark for correct answer	Identifies each share amount
24(iv)	b) $\frac{7}{8}$	1 mark for correct answer	Understands addition of parts
24(v)	c) Both (a) & (b)	1 mark for correct answer	Understands equivalent of fraction
25(I)	The double bar graph shows the cost of fruits per kg in two cities	1 mark for correct answer	Identifies information of double bar graph

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25(ii)	d) watermelon	1 mark for correct answer	Identifies the difference of cost of fruits
25(iii)	Rs. 7	1 mark for correct answer	Identifies the difference of cost of fruits
25(iv)	Ratio = 5:4	1 mark for correct answer	Understands the concept of ratio
25(v)	On Y axis 1 unit = Rs. 10 per kg	1 mark for correct answer	Identifies scale for double graph
26(i)	b) 136	1 mark for correct answer	Understands addition of numbers
26(ii)	b) 11	1 mark for correct answer	Understands the concept of range
26(iii)	c) 13.6	1 mark for correct answer	Understands the concept of mean
26(iv)	a) 13.5	1 mark for correct answer	Understands the concept of median
26(v)	d) 12	1 mark for correct answer	Understands the concept of mode
27(i)	a) $3xy, 5y^2, 7x^2$	1 mark for correct answer	Identifies unlike terms
27(ii)	d) $89xy + 17x^2 + 59y^2$	1 mark for correct answer	Applies addition of like terms
27(iii)	b) 17	1 mark for correct answer	Recognizes coefficient of $x^2$
27(iv)	a) 89	1 mark for correct answer	Recognizes coefficient of $xy$
27(v)	c) Trinomial	1 mark for correct answer	Identifies the type of polynomial
28(i)	c) $10t + 20 = 130$	1 mark for correct answer	Forms the equation using given statement
28(ii)	a) $t$	1 mark for correct answer	Recognizes the variable in the equation
28(iii)	d) 11	1 mark for correct answer	Solves the equation

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28(iv)	d ) $15t + 10 = 130$	1 mark for correct answer	Forms the equation using given statement
28(v)	b) 8	1 mark for correct answer	Solves the equation
29(i)	b ) $120^\circ$	1 mark for correct answer	Identifies corresponding angles concept
29(ii)	c) $180^\circ$	1 mark for correct answer	Identifies sum of interior angles on same side of concept
29(iii)	c ) alternate interior angles	1 mark for correct answer	Identifies alternate interior angles concept
29(iv)	a) Yes	1 mark for correct answer	Identifies vertically opposite angles concept
29(v)	b) $180^\circ$	1 mark for correct answer	Identifies sum of different angles.
30(i)	b ) 8	1 mark for correct answer	Identifies number of vertices of given solid shape
30(ii)	c) 5	1 mark for correct answer	Identifies number of faces of given solid shape
30(iii)	d ) 12	1 mark for correct answer	Identifies number of edges of given solid shape
30(iv)	b) triangle	1 mark for correct answer	Visualises the shape of vertical cut of cone
30(v)	c ) 6 cm	1 mark for correct answer	Understands conversion of solid shape concept and calculates length of cuboid