Multiple Choice Questions

Q1. The general rule for a pattern of letter 'M' is

A	2n	B	3n	C	4n	D	5n

Q2. Find out the constant term in the given algebraic expression: $5a + 3b - \frac{2}{3}$

A	3	B	5	C	$-\frac{2}{3}$	D	-2

Q3. Which of the following is an equation with a variable?

A	$20 - 7 = 13$	B	$x - 20 = 25$	C	$75 \div 5 = 15$	D	$\frac{10}{5} + 25 = 27$

Q4. If one pencil costs ₹ x, then the cost of 25 pencils is_____.

A	₹ x	B	₹25x	C	₹52x	D	₹5

Q5. For x = 3, which expression is correct.

A	$x + 10 = 3$	B	$x + 4 = 7$	C	$2x - 5 = 1$	D	Both B & C

Q6. Perimeter of the square, whose each side is 'n' cm is:

A	$n + 4$	B	4n	C	$4 - n$	D	$\frac{n}{4}$

Q7. How many variables are used in the expression $2x + 3y + 5$?

A	4	B	1	C	3	D	2

Q8. The expression for the statement: 'y multiplied by 10 and then 7 added to product.

A	$10 + y + 7$	B	$7y + 10$	C	$10y + 7$	D	$10y$

Q9. Which of the following is an equation?

A	$m-3 > 5$	B	$2 + (5 \times 4) \neq 28$	C	$6y + 2 = 8$	D	$3c - 5 < -3$

Q10. Karan has 'n' chocolates. He gave 5 chocolates to his younger brother and distributed the remaining equally among his friends. How many chocolates did his friends get in terms of 'n'.

A	$n - 5$	B	$n + 5$	C	5n	D	$\frac{n}{5}$

Source-based Question

Sarah buys books from a dealer for her bookstall. She buys 20 comic books, 15 storybooks and 10 coloring books. A comic book costs ₹ a. A storybook cost ₹ 5 more than a comic book and a coloring book costs ₹ 10 more than a storybook.

Q11.	Which of the following expression shows the total cost of the comic books?							
	A	20	B	20 − a	C	20 + a	D	20a

Q12.	What is the cost of a story book in terms of comic book.							
	A	a + 5	B	5a	C	5a + 15	D	a −5

Q13.	Write an expression which shows the total cost of 15 storybooks							
	A	15a +5	B	15(a + 5)	C	15a	D	10 + a

Q14.	Write the expression for the cost of a coloring book.							
	A	a −10	B	a + 10	C	a + 15	D	a −15

Q15.	A coloring book costs ₹50. What is the cost of the comic book?							
	A	₹20	B	₹40	C	₹45	D	₹35

Q16. CASE STUDY:

Maya went to her grandparents' house during winter vacation. She was curious to know about the ages of different members of her family. If Maya's present age is 'y' years then,

i. What is Maya's age 8 years from now?
ii. Her grandfather's age is 8 times of her age.
What is grandfather's age?
iii. Her grandmother is 2 years younger than grandfather.
What is grandmother's age?
iv. Her father's age is 30 years more than her age.
What is father's age?
v. Mother's age is 3 years less than that of her father.
Write mother's age.
vi. Her brother is two years younger than her. Express age of brother.

ANSWERS

1.	C) 4n	2.	C) $-\frac{2}{3}$	3.	B) x − 20 = 25	4.	B) ₹25x
5.	D) Both B & C	6.	B) 4n	7.	D) 2	8.	C) 10y + 7
9.	C) 6y + 2 = 8	10.	A) n − 5	11.	D) 20a	12.	A) a + 5
13.	B) 15(a + 5)	14.	C) a + 15	15.	D) ₹35	16.i	y + 8
16.ii	8y	16.iii	8y − 2	16.iv	y + 30	16.v	y + 27
16.vi	y−2						