



KINETICS

We Nurture The Future

IIT-JEE | Medical | Foundations

Algebraic Expressions and Identities

Question 1.

When numbers/literals are added or subtracted, they are called _____.

- (a) identities
- (b) expressions
- (c) variables
- (d) terms

Answer: (d) terms

Question 2.

The expression $7xy$ has the factors

- (a) $7, x, y$
- (b) x, y
- (c) $7, x$
- (d) $7, y$

Answer: (a) $7, x, y$

Question 3.

Which of the following is like term as $7xy$?

- (a) 9
- (b) $9x$
- (c) $9y$
- (d) $9xy$

Answer: (d) $9xy$

Question 4.

The like terms of the following are

- (a) $x, 3x$
- (b) $x, 2y$

- (c) $2y$, $6xy$
- (d) $3x$, $2y$

Answer: (a) x , $3x$

Question 5.

The coefficient in the term $-5x$ is

- (a) 5
- (b) -5
- (c) 1
- (d) 2

Answer: (b) -5

Question 6.

How many terms are there in the expression $5xy + 9yz + 3zx + 5x - 4y$?

- (a) 1
- (b) 3
- (c) 4
- (d) 5

Answer: (d) 5

Question 7.

Which of the following is a monomial?

- (a) $4x^2$
- (b) $a + 6$
- (c) $a + 6 + c$
- (d) $a + b + c + d$

Answer: (a) $4x^2$

Question 8.

Add: $7xy + 5yz - 3zx$, $4yz + 9zx - 4y$, $-3xz + 5x - 2xy$.

- (a) $5xy + 3zx + 5x - 4y$
- (b) $5xy + 9yz + 2zx + 5x - 4y$
- (c) $5xy + 9yz + 3zx + 5x - 4y$
- (d) $5xy + 9yz + 3zx + 4y$

Answer: (c) $5xy + 9yz + 3zx + 5x - 4y$

Question 9.

Like terms in the expression $7x$, $5x^2$, $7y$, $-5yx$, $-9x^2$, are

- (a) $7x$, $-5yx$
- (b) $5x^2$, $-5yx$
- (c) $5x^2$, $-9x^2$
- (d) $7x$, $7y$

Answer: (c) $5x^2$, $-9x^2$

Question 10.

The coefficient of x in the expression $-7x + 5$ is

- (a) 5
- (b) -7
- (c) 7
- (d) 0

Answer: (b) -7

Question 11.

Expressions consists of _____ and _____.

- (a) variables, constants
- (b) identities
- (c) expressions
- (d) none of these

Answer: (a) variables, constants

Question 12.

The volume of rectangular box whose length, breadth and height is $2p$, $4q$, $8r$ respectively is

- (a) $14pqr$
- (b) $2p+4q+8r$
- (c) $64pqr$
- (d) 64

Answer: (c) $64pqr$

Question 13.

Which of the following is a binomial?

- (a) $4x + y + 2$
- (b) $2x + 7$
- (c) $3x + 4y - 6$
- (d) $3x$

Answer: (b) $2x + 7$

Question 14.

The area of triangle is 'xy' where 'x' is length and 'y' is breadth. If the length of rectangle is increased by 5 units and breadth is decreased by 3 units, the new area of rectangle will be

- (a) $(x-y)(x+3)$
- (b) $(xy+15)$
- (c) $(x+5)(y-3)$
- (d) $(xy+5-3)$

Answer: (c) $(x+5)(y-3)$

Question 15.

Value of expression ' $a(a^2+a+1)+5$ ' for ' $a = 0$ ' is

- (a) $a+5$
- (b) 1
- (c) 6
- (d) 5

Answer: (d) 5

Question 16.

$$n(4 + m) = 4n + \underline{\hspace{2cm}}$$

- (a) $4m$
- (b) $4n$
- (c) $4mn$
- (d) nm

Answer: (d) nm

Question 17.

If $x = 3$ is solution of $x^2 + kx + 15$, value of k is

- (a) $k = -8, x = 3$
- (b) $k = 8, x = 5$

- (c) $k = 6, x = 5$
- (d) None of above

Answer: (a) $k = -8, x = 3$

Question 18.

How many terms are there in the expression $5 - 3xy$?

- (a) 1
- (b) 2
- (c) 3
- (d) 5

Answer: (b) 2

Question 19.

The expression $x + y + z$ is in

- (a) one variable
- (b) no variable
- (c) three variables
- (d) two variables

Answer: (c) three variables

Question 20.

Terms are added to form _____.

- (a) expressions
- (b) terms
- (c) identities
- (d) none of these

Answer: (a) expressions

Question 21.

The number of terms in the expression $2x^2 + 3x + 5$ is

- (a) 1
- (b) 2
- (c) 3
- (d) 5

Answer: (c) 3

Question 22.

Which of the following is an expression?

- (a) $\frac{1}{2}$
- (b) 3
- (c) $3x-2$
- (d) 2

Answer: (c) $3x-2$
