

CHAPTER - 9

Algebraic Expressions

Questions carrying 1 Mark each :-

Q.1 Identify the terms of the following expression:

$$2x^2y - 2xy^2 + 2x^2y - 18$$

Q.2 Multiply $-\frac{2}{3}p^2 \times \frac{2}{3}pq$

Questions carrying 2 marks each:-

Q.3 Multiply $5ab$ by $(a + b)$.

Q.4 Add

Q.5 Subtract $2x^2y + 2xy^2 + 4xyz$ from $3x^2y + 3xy^2 + 2n$.

Q.6 Find the area of the rectangle whose length is $(a + b)$ units and breadth is $(a - b)$ units.

Questions carrying 3 marks each:-

Q.7 Simplify :-

$$x^2(2x^2 + 2x) + x^2(x + 2x) + 2x^2(x + 4x)$$

Q.8 Multiply : $\left(\frac{-x}{-x}x - \frac{x}{x}y \right) \left(\frac{-x}{-x}x - \frac{x}{x}y \right)$

Q.9 Use suitable identity to find the product

$$(x + 2y)(x + 2y)$$

Q.10 Find the square of _____ using suitable identity.

Q.11 Using identity $(a + b)^2 = a^2 + 2ab + b^2$, find the product 105×107 .

Q.12 Evaluate _____.

Q.13 Simplify $(5a + 2b)^2 + 35ab$.

Q.14 Without actual multiplication find the value of $(3 \quad)^2$.

Multiple choice Questions carrying 1 mark each:-

Q.15 $(2 + 2)^2 =$ _____

(a) $0^2 + 0^2$

(b) $(a + b)(a + b)$

(c) $+2ab$

(d) none of these

Q.16 In algebraic expression $2x^2 + 2y^2 - 2xy + 2yx$ are

(a) constants

(b) like terms

(c) unlike terms

(d) none of these.