Algebraic Expressions Worksheet – 2

1. If 4 is constant and b is variable, then 3b and b + 4 are variables. Mark True / False.

a) True b) False

2. 5p has two terms, that is 5 and p. Mark True / False.

a) True b) False

3. $3p^2 + 4 + 2q^2$ is trinomial. Mark True / False.

a) True b) False

4. 9p x 2qr is a binomial. Mark True / False.

a) True b) False

5. $3p^3 + 2p^2 – 5p + 4$ is a polynomial. Mark True / False.

a) True b) False

6. $2y^2 + \frac{5}{y}$ is a polynomial. Mark True / False.

a) True b) False

7. Coefficient of z in -5yz is -5. Mark True / False.

a) True b) False

8. 7 times of ‘a’ is subtracted from 15 can be written as 15 – 7a. Mark True / False.

a) True b) False

9. Number 5 is added to 4 times the product of x and y. What is the algebraic expression?

a) 4xy b) 5 + 4xy

c) 5xy + 4 d) None of these

10. Identify the like terms from the following.

$5a^2b$, 3abc, $7ab^2$, -2abc

a) $5a^2b$, $7ab^2$ b) $7ab^2$, 3abc

c) 3abc, -2abc d) None of these

11. What is the degree of the below mentioned polynomials?

$p^2 + 7p^5 – p^9$

a) 2 b) 7

c) 5 d) 9

12. What is the degree of the below mentioned polynomials?

$7 + 2x^3 + 3xy^3 + 7y^5$

a) 3 b) 4

c) 5 d) 0

13. The sum of the coefficients in the terms of $5 - 2x^3 - 3xy^2 + 7y^5$ is _____.

a) 7 b) -7

c) 5 d) -5

14. Simplify: $3p + 2q – \{p – (2q - 3)\}$

a) $2p + 4q$ b) $2p + 4q + 3$

c) $2p - 4q$ d) $2p + 4q - 3$

15. Simplify: $5b – \{3b – (2 - b) - 5\}$

a) $b - 7$ b) $b + 7$

c) $3b + 7$ d) None of these

16. What is the constant term of below mentioned algebraic expression.

$3x^2y – xy^2 + 5xy – 8$

a) 3 b) 8

c) 5 d) -8

17. Find the value of $5a^2 + 2ab^2 + 7$, if $a = -2$ and $b = -3$.

a) 9 b) -9

c) 7 d) 36

18. Evaluate $ax^2 + by^2 – cz^2$ for $x = -1$, $y = 1$, $z = 2$, $a = -2$, $b = -1$ and $c = 2$.

a) 14 b) 11

c) 17 d) -11

19. Subtract $4x + 2y$ from $6x - 4y$.

a) $4x - 2y$ b) $2x - 4y$

c) $2x - 6y$ d) $6x + 6y$

20. If $X = a^2 – b^2$ and $Y = a^2 + b^2$, then find the value of $2X – Y$.

a) $a^2 + 3b^2$ b) $a^2 - 3b^2$

c) $2a^2 + 3b^2$ d) None of these