



Octahedral classes, kharadi
2nd floor, yashwant plaza, near bank of India,

Class 08 - Mathematics
Algebraic Expressions and Identities

Maximum Marks: 30

Time Allowed: 1 hour and 30 minutes

Section A

1. Which of the following is a trinomial? 1
 - a) $2x + 5$
 - b) $7x$
 - c) $6x - 5y - 3$
 - d) $4x + 3y$
2. $5x \times 4x^2 = ?$ 1
 - a) $20x^3$
 - b) $20x^2$
 - c) $20x$
 - d) 20
3. Which of the following is like term as $14m^2n^2$? 1
 - a) $15n$
 - b) $15m$
 - c) $15mn$
 - d) $15m^2n^2$
4. Which of the following is a monomial? 1
 - a) $3x + y$
 - b) $5x + 7$
 - c) $7x + 5y + 5$
 - d) $4a$
5. Find the value of $x^2y^2 + 2xy^2z + y^2z^2 - 2x^2y^2z$, when $x = -1, y = 1$ and $z = 2$. 1
 - a) 3
 - b) -2
 - c) -3
 - d) 2

Section B

6. Match the following: 1

Column A	Column B
1. abc	(a) monomial
2. $7mn - m^2n + 2$	(b) binomial
3. $4ab - 1$	(c) trinomial
4. $4ab$ and $4b$	(d) unlike terms

7. Match the following: 1

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Column A	Column B
1. Monomial	(a) $-y^2$ and $5y^2$
2. Binomial	(b) $3x^2y^2$
3. Trinomial	(c) $7x + \frac{1}{2}$
4. Like terms	(d) $x^3 - xy + 3x^2$

8. Match the following:

1

Column A	Column B
1. $7a^2cb$ and $38a^2bc$	(a) degree 7
2. $22a^2b^2c^3$	(b) like term
3. $73x^2yz$ and $82xy^2z$	(c) one variable
4. $x + 3$	(d) unlike term

9. Match the following:

1

Column A	Column B
1. $5xy + 1$	(a) $4b^2$
2. $7mn - 1 + 2$	(b) $1 + 5xy$
3. $4ab \times 1$	(c) $7mn + 1$
4. $4ab \times b$	(d) $4ab$

10. Match the following:

1

Sides	Area
1. $3m, 5mn$	(a) $5x^2y$
2. $2x^2, \frac{5}{2}y$	(b) $15m^2n$
3. $9xy, 64xy$	(c) $14a^3xy$
4. $2ax, 7a^2y$	(d) $576x^2y^2$

Section C

11. Find the product of $4p^3, -3p$

1

12. Find the areas of rectangles with the following monomials as their lengths and breadths respectively : $(10m, 5n)$

1

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|---|---|
| 13. Obtain the volume of rectangular box with the following length, breadth and height respectively :a, 2b, 3c. | 1 |
| 14. Obtain the product of xy, yz, zx | 1 |
| 15. Find the product of 4p, 0 | 1 |

Section D

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| 16. Expand: $(9.7)^2$ | 3 |
| 17. What must be added to sum of $x^2 - 4x + 7$ and $2x^2 + 5x - 9$ is to get 0. | 3 |
| 18. Find 194×206 using suitable identity. | 3 |
| 19. Simplify: $(a + b + c)(a + b - c)$. | 3 |
| 20. Find the value of p in $3p = (28)^2 - (23)^2$ | 3 |