Strive for Perfection

ANGEL'S PUBLIC SCHOOL

SAMPLE PAPER

FINAL EXAM SESSION 2024 – 25

TIME : 3 HRS CLASS – VIII SUBJECT : MATHEMATICS M.M:80

General Instructions:

(a) Section – A comprises 10 questions (1 - 10) of 1 mark each.
(b) Section – B comprises 10 questions (11 - 20) of 2 marks each.
(c) Section – C comprises 6 questions (21 - 26) of 4 marks each. Attempt any 5.
(d) Section – D comprises 8 questions (27 - 33) of 5 marks each. Attempt any 6.

SECTION - A

1. Find the value of $-5x^2y^2z^3 \times 2x^3y^4$ is ___.
(a) $10x^5y^5z^3$ (b) $-10x^5y^6z^3$ (c) $12x^5y^6z^2$ (d) $10x^2y^2z^3$

2. Form the Algebraic expression: The difference of twice of x from one sixth of y.
(a) 1/6y-2x (b) 2x-⅙ x (c) 2x+6y (d) 2x-6y

3. The value of the identity $(a+b)^2$ is ___.
(a) a^2+b^2+2a (b) a^2+b^2+2b (c) a^2+b^2+2ab (d) a^2+b^2-2ab

4. The lateral surface area of a cube with edge 4 cm is ___.
(a) 16 cm^2 (b) 64 cm^2 (c) 8 cm^2 (d) 81 cm^2

5. The volume of the cuboid of dimensions 2cm× 8 cm× 5 cm is ____.
(a) 80 cm^3 (b) 18 cm^3 (c) 15 cm^3 (d) None of these

6. Which of the following is a 3 D shape?
(a) Square (b) Rectangle (c) Cube (d) Circle

7. The formula to calculate the circumference of a circle is ___.
(a) $2\pi r$ (b) πr^2 (c) πr (d) Both a and b

8. Divide the Algebraic expression: $15x^3$ by 3x
(a) $5x^3$ (b) $15x^2$ (c) $5\ x^2$ (d) 3l15 x^2

9. The numerical coefficient of x^2 in the expression $3x^2-5y^4+8$ is ___.
(a) -5 (b) 3 (c) 8 (d) 2

10. Name the polynomial $-4x^2+2x^5+3z^3$.
(a) Monomial (b) Binomial (c) Trinomial (d) None of the above

SECTION -B

11. Simplify the expression: $3(5x-4)-2(7x+3)+4(8x-2)$

12. Find the product: $(7y+3)(2y^2+y+2)$

13. Using identity, find 59^2.

14. Simplify: $(5a-4b)^2-(7a+2b)^2$

15. A bus travels 126 Km on 9 litres. How far would it travels on 5 litres?

16. A person has money to buy 15 pairs of shoes worth Rs 450 each. How many pairs of shoes will he be able to buy if each pair costs Rs 300 more?

17. Factorise the expression using a factor tree: $20a^5-30a^3b^2$

18. Divide the Algebraic expression : $18x^5y^4z^6 \div 9x^2y^2z^2$

19. Factorise: $a^2+8a+16$

20. Form the algebric expression for the following:

(a) The product of x and y subtracted from the sum of x and y.

(b) Seven eights of a number a multiplied by the sum of three times a and b.

SECTION -C (Attempt any 5)

21. Subtract $40-13p^2$ from the sum of $-17p^2+p-22$ and $3p+11p^2-21$

22. Simplify: $\frac{2}{3}(3a+4b+3) - \frac{4}{5}(2a-3b+7c)$

23. Find the continued product of $(x+3/4)(x-3/4)(x^2+9/16)$

24. Factorise: (a) $a^2x^2-y^2$ (b) $25-a^2x^2$

25. Multiply: $(2a^2-3a^4+5)(3a^2+13a+23)$

26. Find the area of the rectangle using the lengths and breadths:

(a) (8x-11/5), (7/5x+ 9)

(b) 9/7 ab,2/5a^2b

SECTION -D (Attempt any 6)

27. Find the lateral surface area and total surface area of a cuboid with length = 12cm, breadth= 10cm and height= 17 cm.

28. Find the volume of the cylinder with height and radius as 5.5 cm and 4.2 cm respectively.

29. Find the product:

(a) $(3x^2+4x+7)(3x^4+14x+7)$

(b) $(3/2x+x^2)(x^2+7x+17)$

30. Simplify: $(3x^2-5x+1)(x-1)-2x(2x+3)$

31. Subtract the expressions.

(a) 2p+3/4q-5 from 8p-q+8

(b) $2x^2y+17xy^2$ from $11xy^2-10x^2y$

32. Factorise:

(a) a^2+a

(b) $a^2+8a+16$

33. Draw a double line graph on the savings of a sister and her brother for consecutive years.

Year	2018	2019	2020	2021
Sister	₹ 1100	₹ 1400	₹ 1750	₹ 2500
Brother	₹ 1200	₹ 1600	₹ 2050	₹ 2350