

Standard - 7

MATHS

Maximum Marks:60

Time Allowed:2.00 Hours

5×1=5

I. Choose the correct answer:

- A Cricket pitch is about 264 cm wide. It is equal to _____ m.
a) 26.4 b) 2.64 c) 0.264 d) 0.0264
- If the circumference of a circle is 82π , then the value of 'r' is _____.
a) 41 cm b) 82 cm c) 21 cm d) 20 cm
- The exponential form of 72 is _____.
a) 7^2 b) 2^7 c) $2^2 \times 3^3$ d) $2^3 \times 3^2$
- The degree of $6x^7 - 7x^3 + 4$ is _____.
a) 7 b) 3 c) 6 d) 4
- Which of the following rule is not sufficient to verify the congruency of two triangles?
a) SSS rule b) SAS rule c) SSA rule d) ASA rule

5×1=5

II. Fill in the blanks:

- $3 + \frac{4}{100} + \frac{9}{1000} =$ _____.
- The value of $(32 \times 65)^\circ$ is _____.
- Degree of the constant term is _____.
- The elements along the sixth row of the Pascal's triangle is _____.
- The exterior angle of a triangle is equal to the sum of the two _____.

5×1=5

III. Say True or False:

- $3 + \frac{4}{100} + \frac{9}{1000} = 3.49$.
- $2^3 < 3^2$.
- The degree of the expression $-4x^2yz$ is -4 .
- 30° , 60° and 90° be the angles of a triangle.
- $2^{40} + 2^{40}$ is equal to 2^{80} .

5×1=5

IV. Match it:

- | | | |
|---|---|--------------------|
| 16. A Circumference of a circle | - | (LB - lb) sq.units |
| 17. Area of the circle | - | 360° |
| 18. Area of the rectangular path | - | 180° |
| 19. The sum of three angles in a triangle | - | πr^2 sq.units |
| 20. The exterior angles of a triangle add up to | - | $2\pi r$ unit |

6×2=12

V. Answer any six:

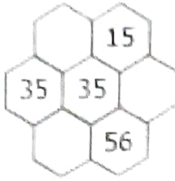
- Find the decimal form of the following fractions $23 + \frac{6}{10} + \frac{8}{1000}$.
- Represent the following decimal numbers on the number line. (i) 1.7
- The diameter of a circular well is 4.2 m. What is its circumference?
- Find the area of the circle of radius 21 cm. (Use $\pi = \frac{22}{7}$)
- Which is greater 3^4 or 4^3 .
- Simplify using laws of exponents : (i) $2^5 + 2^3$.
- If two angles of a triangle having measures 65° and 35° find the measure of the third angle.

V7M

28. Identify the correct relationship between x and y from the given table.

x	1	2	3	4	-
y	4	8	12	16	-

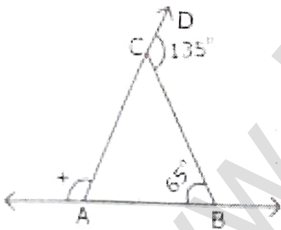
29. The following hexagonal shapes are taken from Pascal's triangle. Fill in the missing numbers.



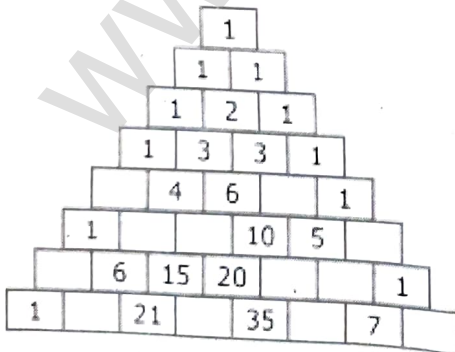
VI. Answer any six:

6×3=18

30. There are 26 boys and 24 girls in a class. Express the fractions of boys and girls as decimal numbers.
31. Arrange the given decimal numbers in ascending and descending order.
(i) 17.35, 71.53, 51.73, 73.51, 37.51
32. The radius of a tractor wheel is 77 cm. Calculate the distance covered by it in 35 rotations? (Use $\pi = \frac{22}{7}$)
33. Find the length of the Rope by which a bull must be tethered in order that it may be able to graze an area of 2464 m².
34. A floor is 10 m long and 8 m wide. A carpet of size 7 m long and 5 m wide is laid on the floor. Find the area of the floor that is not covered by the carpet.
35. Simplify using quotient rule of exponents.
(i) $\frac{2^8 \times 3^5 \times 5^4}{3^3 \times 5^3 \times 2^4}$ (ii) $\frac{6^4}{6^0}$
36. Add and find the degree of the following expressions:
(i) $(K^2 - 25K + 46)$ and $(23 - 2K^2 + 21K)$
37. Find the value of x in each of the given Triangles.



38. Complete the Pascal's Triangle.



VII. Answer any two:

2×5=10

39. Draw a triangle ABC given that $AB = 6$ cm, $AC = 5$ cm and $\angle A = 60^\circ$.
40. Draw an equilateral triangle of side 7.5 cm.
41. Draw a triangle PQR given that $\angle P = 115^\circ$, $\angle Q = 40^\circ$ and $PQ = 6$ cm.