7th

Maths

Annual Exam

1. Find the value of :
- 2^8, 11^3 9^3 13^3 5^4

2. Simplify :
$2x\,10^3$, $0x10^4$ 3^2x10^4 7^2x3^2 4^3x5^2

3. Fill in the blanks :
- $(ab)^m$ = ... $a^m b$ .....
- a^m x a^n ..... $a^{(m+n)}$ .....
- Circumference of the circle =..... $2\pi r$ .....
- 1 cm^2 = ... $0.0001\ m^2$
- Simple interest = ... principal x interest Rate x Time .....

4. Convert the following fractional numbers to percents :
- 1/8 , 5/4 , 3/40 , 2/7 , 15/2

5%

5. Find the value of :
- (-4) ÷ 2/3
- -3/5 ÷ 2
- -4/5 ÷ (-3)
- -1/8 ÷ ¾

6. Factors :
- 648 , 405 , 540 , 3600

7. Simplify the expressions & find its value when a =5 & b = -3
$2\,(a^2 + ab\,) + 3ab$

8. Using laws of exponents , simplify and write the answers in exponential form:
- $(5^2)^3 \div 5^3$
- 3^3 x 3^4 x 3^8
- a^3 x a^2
- $(3^4)^3$
- 6^{15} ÷ 6^{10}

9. A garden is 90 m log & 75m braod. A path 5 m wide is to be built outside it . Find the area of the path . Also find the area of the garden in hectare.

10. Solve :
    - $4pq - 5q^2 - 3p^2$ from $5p^2 + 3q^2 - pq$
    - $-x^2 + 10x - 5$ from $5x - 10$

11. Find the circumference of the circles with following radius : (take $\pi = 22/7$)
    - 28mm , 21cm

12. The perimeter of a rectangular sheet is 100 cm , if the length is 35 cm , find its breadth. Also find the area.
13. Find the area of a square park whose perimeter is 320 m.
14. Juhi sells a washing machine for Rs. 13,500 she loses 20 % in the bargain , what was the price at which she bought it ?
15. If meena gives an interest of Rs. 45 for one year at 9% rate per annum, what is the sum she borrowed.