Past Paper Questions

## Algebra

(Quadratic Equations)
MATHEMATICS
Class 8

## Encircle the correct option.

1. Solve the equation $4 x^{2}-16=0$
A) -2 or 2
B) 2 or -4
C) -1 or 1
D) 0 or 1
2. If $a^{2}-121=0$, then value of $a$ is
A) 11
B) 12
C) $\pm 11$
D) 13
3) If $(x-3)(x+2)=0$, then the value of $x$ is
A) $3,-2$
B) $-3,-2$
C) $-3,2$
D) 3,2
4) What are the values of $x$ in the solution of $x^{2}-49=0$
A) $x=7$ or $x=-7$
B) $x=-7$ or $x=-7$
C) $x=7$ or $x=7$

## Questions

Q no 01) Solve the equations
l. $x^{2}-3 x+18=0$
II. $a^{2}-9=0$
III. $3 x^{2}-11 x+8=0$
IV. $4 x^{2}-9=0$
V. $\frac{4}{x+3}=\frac{x-1}{3}$

Q no. 02) The sum of a positive integer $x$ and its square is 56 .
I. Write an equation in $x$ to present this information.
II. Solve the equation to find the integer $x$.

Q no. 03) Find two consecutive positive even numbers such that the square of their sum is 100 .
Q no. 04) The length and breadth of a rectangle are $(x+2) \mathrm{cm}$ and $x \mathrm{~cm}$ respectively. If the area of the rectangle is $120 \mathrm{~cm}^{2}$, find $I$. The value of $x$
II. The perimeter of this rectangle.

Q no. 05) The sum of the squares of two consecutive numbers is 145 . Calculate the numbers.
Q no. 06) The sum of the square of two consecutive odd numbers is 290 . Find the numbers.

