Circles - Class XI

Related Questions with Solutions

Questions

Quetion: 01

A circle with centre (3, 6) passes through (–1, 1). Its equation is

A. $x^2 + y^2 - 6x - 12y + 3 = 0$

B. $x^2 + y^2 + 6x - 10y + 3 = 0$

C. $x^2 + y^2 - 3x - 6y + 1 = 0$

D. $x^2 + y^2 - 6x - 12y + 4 = 0$

Solutions

Solution: 01

We have, Centre = C[3, 6]

Let P[–1, 1] be any point on the circle. Then, equation of circle is,

$(x - 3)^2 + (y - 6)^2 = (3 + 1)^2 + (6 - 1)^2$

$\Rightarrow x^2 + 9 - 6x + y^2 + 36 - 12y = 16 + 25$

$\Rightarrow x^2 + y^2 - 6x - 12y + 4 = 0$

Correct Options

Answer:01

Correct Options: D