Circles - Class XI

Related Questions with Solutions

Questions

Quetion: 01

The number of common tangents that can be drawn to the circle $x^2+y^2-4x-6y-3=0$ and $x^2+y^2+2x+2y+1=0$ is

A. 1

B. 2

C. 3

D. 4

Solutions

Solution: 01

The two circles are $x^2+y^2-4x-6y-3=0$ and $x^2+y^2+2x+2y+1=0$

Centre: $C_1 \equiv (2,3), C_2 \equiv (-1,-1)$ radii : $r_1=4, r_2=1$

We have $\mathrm{C_1C_2}=5=\mathrm{r_1}+\mathrm{r_2}$, therefore there are 3 common tangents to the given circles.

Hence [C] is the correct answer.

Correct Options

Answer:01

Correct Options: C