

## Mathematics ECAT Pre Engineering Online Test

| Sr | Questions                                              | Answers Choice                                               |
|----|--------------------------------------------------------|--------------------------------------------------------------|
| 1  | The general equation of a circle is                    |                                                              |
| 2  | Question Image                                         |                                                              |
| 3  | Question Image                                         |                                                              |
| 4  | Question Image                                         |                                                              |
| 5  | Question Image                                         | A. 2<br>B. 4<br>C. 3<br>D. 16                                |
| 6  | Question Image                                         | A. 5<br>B. 25<br>D. 3                                        |
| 7  | Question Image                                         |                                                              |
| 8  | Question Image                                         |                                                              |
| 9  | Question Image                                         |                                                              |
| 10 | Two circles are said to be concentric if they have     | A. same radius B. same chord C. same centre D. same diameter |
| 11 | Question Image                                         |                                                              |
| 12 | Question Image                                         | A. (1, 3)<br>B. (-1, -3)<br>C. (1, -3)<br>D. (-1, 3)         |
| 13 | Question Image                                         | A. 8<br>C. 4<br>D. 64                                        |
| 14 | Question Image                                         | A. 0<br>B. 1<br>C. 13                                        |
| 15 | Question Image                                         | A. 11<br>B. 61<br>D. 1                                       |
| 16 | Question Image                                         | A. (-6,4)<br>B. (-3,2)<br>C. (6,-4)<br>D. (3, -2)            |
| 17 | Question Image                                         |                                                              |
| 18 | The centre fo the circle $x^2 + y^2 + 12x - 10 = 0$ is | A. (12, -10)<br>B. (6, -5)<br>C. (-12, 10)<br>D. (-6, 5)     |
| 19 | Question Image                                         |                                                              |
| 20 | Question Image                                         | A. (g,f) B. (-g,f) C. (g,-f) D. (-g,-f)                      |
| 21 | The parametric equations of a circle are               |                                                              |
| 22 | Question Image                                         |                                                              |
| 23 | Question Image                                         |                                                              |
|    |                                                        |                                                              |

| 24 | The equation of the circle wit (-1, 1) and radius 2 is |                                    |
|----|--------------------------------------------------------|------------------------------------|
| 25 | Question Image                                         |                                    |
| 26 | Question Image                                         |                                    |
| 27 | Question Image                                         |                                    |
| 28 | Question Image                                         | A1 B. 0 C. 1 D. Undefined          |
| 29 | Tan 360° =                                             | A1 B. 0 C. 1 D. Undefined          |
| 30 | Sin 270° =                                             | A1<br>B. 0<br>C. 1<br>D. Undefined |