

## ECAT Mathematics MCQ's Test For Full Book

| Sr | Questions                                                                                                                                    | Answers Choice                                                                                           |
|----|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 1  | Sin-1(-x)=                                                                                                                                   | A. x<br>Bx<br>Csin-1 x<br>D. cos-1 x                                                                     |
| 2  | The set { 1 , -1} is closed w.r.t.                                                                                                           | A. Addition B. Multiplications C. Subtraction D. None of these                                           |
| 3  | Question Image                                                                                                                               | A. sin h x B. cos h x C. tan h x D. cot h x                                                              |
| 4  | Question Image                                                                                                                               |                                                                                                          |
| 5  | Question Image                                                                                                                               |                                                                                                          |
| 6  | The set of all positive even integers is                                                                                                     | A. Not a group B. A group w.r.t. subtraction C. A group w.r.t. division D. A group w.r.t. multiplication |
| 7  | If $b_1$ , $b_2$ , $b_3$ , are in G.P. with first term unity and common ratio r, then the minimum value of $b_1$ - $b_3$ + $b_5$ is equal to | A. 3/4 B. 1/4 C. 1 D. None of these                                                                      |
| 8  | j <sup>-</sup> (4n+2) =                                                                                                                      | A. 1<br>B. i<br>C1<br>Di                                                                                 |
| 9  | The product of the four fourth roots of unity is                                                                                             | A. 0<br>B. 1<br>C1<br>D. None of these                                                                   |
| 10 | Question Image                                                                                                                               | A. I<br>B.  A <br>C.  A  I<br>D. None of these                                                           |
| 11 | $(x+2)^2 = x^2 + 4x + 4$ is                                                                                                                  | A. A linear equation B. A cubic equation C. A quadratic equation D. None                                 |
| 12 | $\pi$ is the period of the function                                                                                                          | A.  sin x  +  sin x  B. sin <sup>4</sup> x + cos x C. sin (sin x) + sin (cos x) D. None of these         |
| 13 | Which is a proper rational fraction                                                                                                          |                                                                                                          |
| 14 | The Principal value of sin-1 (-1/1/2)                                                                                                        | A. π/2<0:p>  Bπ/2<0:p>  C. π<0:p>  Dπ<0:p>  Dπ<0:p>  /o:p>                                               |
| 15 | Question Image                                                                                                                               |                                                                                                          |
| 16 | Question Image                                                                                                                               |                                                                                                          |
| 17 | Question Image                                                                                                                               | A. A complex number B. A rational number C. A natural number D. An irrational number                     |
|    |                                                                                                                                              |                                                                                                          |

| 18 | The value of x, and y, when $(x + iy)^2 = 5 + 4i$                 | A. X = 2, y = -1<br>B. X = -2, y=1<br>C. X = 2, y = -1<br>D. X = 2, y = 2 |
|----|-------------------------------------------------------------------|---------------------------------------------------------------------------|
| 19 | Question Image                                                    | A. 0 B. 1 C1 D. none of these                                             |
| 20 | If the trace of matrix A is 5, then the trace of the matrix 3A is | A. 3/5<br>B. 5/3<br>C. 8<br>D. 15                                         |