# ECAT Mathematics MCQ's Test For Full Book

| Sr | Questions | Answers Choice |
|----|-----------|----------------|
| 1 | If Sin A = sin B, cos A = cos B, then the value of A in terms of B is | |
| 2 | Question Image | A. Associative law of multiplication<br>B. Commutative law of addition<br>C. Commutative law of multiplication<br>D. Associative law of addition |
| 3 | Question Image | |
| 4 | The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is | |
| 5 | If A = [aij]mxpand B =[aij]pxnthen order of BA is | A. m x n<br>B. p x n<br>C. n x m<br>D. None of these |
| 6 | What is the number of elements of the power set of { } | A. 0<br>B. 1<br>C. 2<br>D. 3 |
| 7 | Question Image | A. Singleton set<br>B. A set with two points<br>C. Empty set<br>D. None of these |
| 8 | For a square matrix A, if $A = A^t$, then A is called | A. matrix<br>B. Transpose<br>C. Symmetric<br>D. Non-symmetric |
| 9 | If the angle between two vectors with magnitude 2 and 15 is 30°then their scalar product is | B. 15<br>C. 30 |
| 10 | Apollonius was a | A. rocket<br>B. Muslim scientist<br>C. Greek mathematicians<br>D. method of finding conics |
| 11 | If in the expansion of $(1+x)^n$, co-efficients of 2nd, 3rd and 4th terms are in A.P., then x= | A. 4<br>B. 5<br>C. 6<br>D. 7 |
| 12 | If $2\tan^1(\cos x) = \tan^{-1}(\mathrm{cosec}^2 x)$, then x is equal to | A. $\pi/3$<br>B. $\pi/2$<br>C. $\pi/6$<br>D. $\pi$ |
| 13 | A∪(A∪B)= -------------------- | A. B<br>B. A<br>C. A∪B<br>D. None of these |

| 14 | The product of complex numbers (a,b) and (c,d) is | A. (ac, bd)<br>B. (ac-bd, ad+bc)<br>C. (ab,cd)<br>D. (ac+bd,ad-bc) |
|---|---|---|
| 15 | The generators of a cone are also called | A. rulings<br>B. apex<br>C. nappes<br>D. ellipse |
| 16 | Question Image | A. No solution<br>B. One real solution<br>C. More than one real solution<br>D. None of these |
| 17 | If $x^2 - 7x + a$ has remainder 1 when divided by $x + 1$, then a = _____ | A. -7<br>B. 7<br>C. 0<br>D. None of these |
| 18 | If $3x^4 + 4x^3 + x - 5$ is divided by $x + 1$, then the reminder is | A. 0<br>B. 7<br>C. -7<br>D. 5 |
| 19 | If there is one-one correspondence between A and B, then we write. | A. A = B<br>B. A ⊆ B<br>C. A ⊇ B<br>D. A ~ B |
| 20 | If $f(x) = x^2 - x$ then $f(0)$ is | A. 0<br>B. 1<br>C. 2<br>D. 3 |