

## ECAT Mathematics MCQ's Test For Full Book

| Qr. | Questions   | Anguara Chaiga  |
|-----|---|---|
| Sr  | Questions   | Answers Choice  |
| 1   | If $2 \tan^{1}(\cos x) = \tan^{-1}(\csc^{2}x)$ , then x is equal to   | A. <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px, text-align: center; background-color: rgb(255, 255, 248);'><i>π</i></span> / 3  B. <span style='font-family: "Times New Roman"; font-size: 24px, color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);'><i>π</i></span> / 2  C. <span style='font-family: "Times New Roman"; font-size: 24px, color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);'><i>π</i></span> / 6  D. <span style='font-family: "Times New Roman"; font-size: 24px, color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);'><i>π</i></span> / 6  D. <span style='font-family: "Times New Roman"; font-size: 24px, color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);'><i>π</i></span> |
| 2   | Question Image  |   |
| 3   | A point where two of its boundary lines intersect is called   | A. Corner point B. Feasible point C. Vertex D. Feasible solution  |
| 4   | Question Image  |   |
| 5   | Z is the set of integers, $(z, *)$ is a group with $a * b = a + b + 1$ , a, b $\subseteq$ G. then inverse of a is | Aa B. a + 1 C2 -a D. None of these  |
|     |   | A. x <sup>3</sup> - x <sup>2</sup> + x  |
| 6   | Question Image  | + c<br>B. 6x - 2 + c<br>C. x <sup>3</sup> - 2x + c  |
| 7   | The sum of all positive integral multiple of 5 less than 100 is   | A. 950<br>B. 760<br>C. 1230<br>D. 875   |
| 8   | The solution set of the equation $4 \cos^2 x - 3 + 0$ is  | D. none of these  |
| 9   | If $a^{X}=b^{Y}=c^{Z}$ and a, b, c are in G.P. then x, y, z are in  | A. A.P. B. G.P. C. H.P. D. None of these  |
| 10  | Let A and B be two non-empty sets, then any subset of the cartesian product A x B called a                        | A. Function B. Domain C. Range D. Binary relation   |
| 11  | The number of combinations of 10 different objects taken 8 objects at a time is                                   | A. 90<br>B. 45<br>C. 55<br>D. 50  |
|     |   | A.  |

A. <span style="font-family:
&quot;Times New Roman&quot;; fontsize: 24px; color: rgb(34, 34, 34);
text-align: center; background-color:
rgb(255, 255, 248);"><i>>π</i>>
</span>/ 2
B. <span style="font-family:
&quot;Times New Roman&quot;; font-

| 12 | Question Image   | size: ∠4px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);"> <i>π</i> /3  C. <span style='font-family: " Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);'><i>π</i> </span> /4  D. <span style='font-family: " Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);'><i>π</i> </span> |
|----|--|--|
| 13 | Question Image   |  |
| 14 | pth term of an H.P. is qr and qth term is pr then the rth term of the H.P. is                        | A. pqr B. 1 C. pq D. pqr <sup>2</sup>  |
| 15 | w <sup>73</sup> =  | A. 0<br>B. 1<br>C. w<br>D. w <sup>2</sup>  |
| 16 | The function $f: x \rightarrow y$ defined as $f(x) = \alpha \forall x \in X, \alpha \in y$ is called | <ul><li>A. Constant function</li><li>B. Polynomial function</li><li>C. Identity function</li><li>D. Linear function</li></ul>  |
| 17 | The distance from the point P(6,-1) to the line $6x - 4x + 9 = 0$ is:                                | A. 5/7<br>B. √52/7<br>C. 2/48<br>D. 49 /√52  |
| 18 | Question Image   |  |
| 19 | Question Image   | A. a constant function B. linear function C. quadratic funtion D. none of these  |
| 20 | If $x^4$ - $10x^2$ - $2x + 4$ is divided by $x + 3$ , then the reminder is                           | A. 1<br>B. 0<br>C. 4<br>D. None of these   |