

## ECAT Mathematics MCQ's Test For Full Book

| Sr | Questions  | Answers Choice   |
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| 1  | Inverse of the function $y=10x$ is                                     | A. $y=\log x$<br>B. $y=\ln x$<br>C. $x=10y$<br>D. $x=10y$  |
| 2  | In $(x + iy)$ , $y$ is called as                                       | A. Imaginary part<br>B. Complex number<br>C. Real part<br>D. None of above   |
| 3  | Roots of the equation $x^2 + 7x + 12 = 0$ are                          | A. $\{3, -4\}$<br>B. $\{-3, 4\}$<br>C. $\{3, 4\}$<br>D. $\{-3, -4\}$   |
| 4  | If $a=5j + 2j, b=2i - 3j$ , then $ a+2b $ =                            | A. $\sqrt{21}$<br>B. $\sqrt{97}$<br>C. $\sqrt{39}$<br>D. None of these   |
| 5  | Question Image <input style="width: 100%; height: 20px;" type="text"/> | A. $-3 - 2i$<br>B. $3 + 2i$<br>C. $1 + 2i$<br>D. $1 - 2i$  |
| 6  | If $A=B$ , then  | A. $A \subset B$ and $B \subset A$<br>B. $A \subseteq B$ and $B \subseteq A$<br>C. $A \subseteq B$ and $B \subseteq A$<br>D. None of these   |
| 7  | Question Image <input style="width: 100%; height: 20px;" type="text"/> |  |
| 8  | $(2, 1)$ is in the solution of the inequality                          | A. $2x + y < 7$<br>B. $x - y > 2$<br>C. $3x + 5y < 6$<br>D. $2x + y < 6$   |
| 9  | $Q \cup Q'$ =  | A. $Q$<br>B. $Q'$<br>C. $N$<br>D. $R$  |
| 10 | If $x^2 + y^2 = 1$ , then $dy/dx$                                      | A. $y/x$<br>B. $-x/y$<br>C. $1/x$<br>D. None of these  |
| 11 | The solution set of $x < 4$ is   | A. <span style="color: green; font-family: 'Times New Roman'; font-size: 24px; text-align: center; background-color: #e0f2f1; padding: 2px;">-</span> $x < 4$<br>B. <span style="color: green; font-family: 'Times New Roman'; font-size: 24px; text-align: center; background-color: #e0f2f1; padding: 2px;">-</span> $x > 4$<br>C. <span style="color: green; font-family: 'Times New Roman'; font-size: 24px; text-align: center; background-color: #e0f2f1; padding: 2px;">-</span> $x < 2$<br>D. <span style="color: green; font-family: 'Times New Roman'; font-size: 24px; text-align: center; background-color: #e0f2f1; padding: 2px;">-</span> $x > 2$ |
| 12 | Question Image <input style="width: 100%; height: 20px;" type="text"/> | D. none of these   |

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| 13 | If A is a set then any subset R of $A \times A$ is called  | <p>A. relation on A<br/> B. relation on B<br/> C. relation from A to B<br/> D. relation from B to A</p> |
| 14 | A sequence whose reciprocal is an A.P is called  | <p>A. Oscillator<br/> B. H.P<br/> C. G.P<br/> D. None of these</p>                                      |
| 15 | Question Image <input type="text"/>  | <p>A. 120<br/> B. 5<br/> C. 4<br/> D. 6</p>   |
| 16 | The sets {1, 2, 4} and {4, 6, 8, 10} are   | <p>A. Equal sets<br/> B. Equivalent sets<br/> C. Disjoint sets<br/> D. Over lapping sets</p>            |
| 17 | Question Image <input type="text"/>  | <p>A. Orthogonal<br/> B. Involutory<br/> C. Idempotent<br/> D. Nilpotent</p>                            |
| 18 | General solution of $1 + \cos x = 0$ is  |   |
| 19 | Which of the following points is a point of intersection of the curve $x+y = 8$ and the straight line $2x - y = 2$ . | <p>A. -2,-2<br/> B. 2,2<br/> C. 0.4,2.8<br/> D. 0,1</p>   |
| 20 | Function is a special type of  | <p>A. relation<br/> B. ordered pairs<br/> C. Cartesian product<br/> D. Set</p>                          |