

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	<p>A. Principle of equality of fractions</p> <p>B. Rule for product of fraction</p> <p>C. Rule for quotient of fraction</p> <p>D. Golden rule of fractions</p>
2	A tower subtends an angle of 30° at a point distant d from the foot of the tower and on the same level as the foot of the tower. At a second point, h vertically above the first, the angle of depression of the foot of the tower, is 60° . The height of the tower is	<p>A. $h/3$</p> <p>B. $h/3d$</p> <p>C. $3h$</p> <p>D. $3h/d$</p>
3	For ≥ -2 , $1+3+5+\dots+(2n+5)$	<p>A. $(n+2)^2$</p> <p>B. $(n-2)^2$</p> <p>C. $2n+1$</p> <p>D. $(n+3)^2$</p>
4	In following question, a number series is given with one term missing. choose the correct alternative that will same pattern and fill in the blank spaces. 1, 4, 9, 16, 25, x	<p>A. 35</p> <p>B. 36</p> <p>C. 48</p> <p>D. 49</p>
5	The two lines $x + y = 0$ and $2x - y + 3 = 0$ intersect at the point:	<p>A. $(-1,1)$</p> <p>B. $(2,3)$</p> <p>C. $(1,3)$</p> <p>D. $(-1,2)$</p>
6	$(a,b) = (c,d)$ if and only if	<p>A. $a=b$ and $c=d$</p> <p>B. $a=d$ and $b=c$</p> <p>C. $a=c$ and $b=d$</p> <p>D. $a-b=c-d$</p>
7	If $f(x) = x^3 - 2x^2 + 4x - 1$ then $f(0)$ is	<p>A. 0</p> <p>B. 1</p> <p>C. -1</p> <p>D. none of these</p>
8	If A is a set then any subset R of $A \times A$ is called	<p>A. relation on A</p> <p>B. relation on B</p> <p>C. relation from A to B</p> <p>D. relation from B to A</p>
9	If $a = 2i + 2j$, $b = 3i - j$ and $c = 4i + 5j$, the $3b - a - 2c =$	<p>A. $-i - 15j$</p> <p>B. $i - 15j$</p> <p>C. $i - 3j$</p> <p>D. None of these</p>
10	Question Image	<p>A. 3</p> <p>B. 6</p> <p>C. 0</p> <p>D. None of these</p>
11	If S is a sample space and event set $E \neq \emptyset$ then $P(E)$ is	<p>A. ≥ 0</p> <p>B. 1</p> <p>C. ≤ 1</p> <p>D. 0</p>
12	The set $\{0, -1\}$ hold closure property under	<p>A. Addition</p> <p>B. Both $+$ & \times</p> <p>C. Multiplication</p> <p>D. None of these</p>
13	Question Image	<p>A. 4</p> <p>B. 3</p> <p>C. 2</p> <p>D. 1</p>
14	In a country 55% of the male population has houses in cities while 30% have houses both in cities and in villages find the percentage of the population that has houses only in villages	<p>A. 45</p> <p>B. 30</p> <p>C. 25</p> <p>D. 50</p>
15	$\{1, 2, 3, 4, \dots\}$ is set of _____	<p>A. Natural numbers</p> <p>B. Whole numbers</p> <p>C. Integers</p> <p>D. Rational numbers</p>

16	The domain of $f(x) = \log x$ is	<p>A. $[0, \infty)$</p> <p>B. $(0, \infty)$</p> <p>C. $[0, \infty)$</p> <p>D. $[-\infty, \infty)$</p>
17	Question Image	<p>A. $1 + \tan^2 x + c$</p> <p>B. $\tan x + c$</p> <p>C. $-\tan x + c$</p> <p>D. $\cot x + c$</p>
18	Which of the following represents a vector	D. (x, y)
19	The statement that a group can have more than one identity elements is	<p>A. True</p> <p>B. False</p> <p>C. Ambiguous</p> <p>D. Some times true</p>
20	Question Image	