

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	<p>A. $6x - 2 + c$ B. $x^3 - x^2 + x + c$ C. $6x - x^2 + c$ D. $6x^3 - x^2 + c$</p>
2	The complement of set A relative to universal set U is the set	<p>A. $\{x / x \in A \wedge x \in U\}$ B. $\{x / x \notin A \wedge x \in U\}$ C. $\{x / x \in A \text{ and } x \notin U\}$ D. $A - U$</p>
3	Question Image	
4	Question Image	
5	A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability of a person guessing the right combination is	<p>A. 1 / 500 B. 1 / 504 C. 1 / 252 D. 1 / 250</p>
6	If $f: A \rightarrow B$ is an injective function and second elements of no two of its ordered pairs are equal, then f is called	<p>A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these</p>
7	A conditional "if p then q" is denoted by	
8	The solution of differential equation:	<p>A. $dy/dx + y/x = x^2$ is : B. $4xy = x^4 + c$ C. $4x = x^4 + c$ D. $4y = x^4 + c$ E. $4x = 4x^3 + c$</p>
9	$\cos^2 x + \sin^2 x$	<p>A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd</p>
10	Which of the vectors have opposite direction?	
11	The seventh term of an A.P whose first term is P and common difference is q. is	<p>A. $P - 6q$ B. $P + 6q$ C. $P - 4q$ D. $P - nq$</p>
12	The symbol \exists stand for	<p>A. Such that B. This implies that C. For all D. There exist</p>
13	Range of $\tan x$ is _____	<p>A. $[-1, -]$ B. \mathbb{R} C. Negative real numbers D. $\mathbb{R} - \{x \mid -1 \leq x \leq 1\}$</p>
14	We solve the system of non-homogeneous linear equations by	<p>A. a and b B. b and c C. c and a D. a, b and c</p>
15	Question Image	<p>A. $\frac{\pi}{3}$ B. $\frac{\pi}{4}$ C. $\frac{\pi}{2}$ D. π</p>

A. In-circle

16	A circle which touches one side of a triangle externally and the other two sides produced is called _____	B. Circum circle C. Escribed circle D. None of these
17	Question Image	
18	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is 45° . The height of the tower is	A. 37m B. 97m C. 101m D. 70m
19	Question Image	D. none of these
20	The null vector is regarded to be perpendicular to	A. Every vector B. In some cases C. Both a b D. None