

ECAT Pre Engineering MCQ's Test For Mathematics Full Book

Sr	Questions	Answers Choice
1	The middle term of $(x-y)^8$ is	A. $25x^4y^4$ B. $70x^4y^4$ C. $120x^4y^4$ D. $97x^4y^4$
2	If $\cos(2\sin^{-1}x) = 1/9$, then what is the value of x ?	A. $1/3$ B. $-2/3$ C. $2/3$ D. $2/3, -2/3$
3	Question Image	A. false B. true C. not valid D. undefine
4	Question Image	A. x C. y
5	In a class of 100 students, 60 drink tea, 50 drink coffee and 30 drink both. A student from his class is selected at takes at last one of 2 drinks is	A. $2/5$ B. $3/5$ C. $4/5$ D. None of these
6	The set of all positive even integers is	A. Not a group B. A group w.r.t subtraction C. A group w.r.t division D. A group w.r.t multiplication
7	On simplifying the express in $\sin 2O/1 + \cos 2O$ the result is.	A. $\sin O$ B. $\cotan O$ C. $\tan O$ D. $\sec O$
8	If $f(x) = x^2 - x$ then $f(0)$ is	A. 0 B. 1 C. 2 D. 3
9	In ladder leaning against a vertical well makes an angle of 24° with the wall, Its foot is 5m from the wall, its length is	A. 5.47m B. 2m C. 7m D. 6.29m
10	Question Image	B. $\ln(x^2 - x + 1) + c$
11	If S is a sample space and event set $E = S$ then $P(E)$ is	A. >0 B. 1 C. <1 D. 0
12	Which of the following ordered pair is a solution of the inequality $x + 2y < 6$?	A. (2,3) B. (2,2) C. (6,0) D. (1,1)
13	Range of $\tan \theta$ is	A. Set of complex numbers B. Set of real numbers C. Set of odd numbers D. Set of positive integers only
14	Question Image	A. 4 B. 3 C. 2 D. 1
15	G is geometric mean between a and b if a, G, b is	A. A.P. B. G.P. C. H.P. D. None of these

16	Question Image	<p>align: center; background-color: rgb(255, 255, 224);"><i>π</i> B. <i style="text-align: center;">2π</i> C. <i style="text-align: center;">$\pi/2$</i> D. None of these</p>
17	Question Image	<p>A. -76 B. 96723 C. 5721 D. -96096</p>
18	If $B-A \neq \emptyset$, then $n(B-A)$ is equal to	<p>A. $n(a)+n(c)$ B. $n(c)-n(a)$ C. $n(a)-n(c)$ D. None of these</p>
19	Question Image	<p>A. 1 B. -1 C. 5 D. 2</p>
20	If $Z = (1,2)$, then $Z^{-1} = ?$	<p>A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)</p>