

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	$f(x) = 2^x + 3 \cdot 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
2	If $x^3 + ax^2 - a^2x - a^3$ is divided by $x + a$, then the remainder is	A. 0 B. a^3 C. $2a^3$ D. $-2a^3$
3	Question Image	
4	Question Image	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
5	Question Image	A. 16 / 7 B. 6 / 17 C. 7 / 16 D. None of these
6	The range of $y = \sin x$ is _____	A. [1, -1] B. [-1, 1] C. [0, -1] D. [- <i>∞</i> , 1] E. [-1, <i>∞</i>]
7	Let A, B and C be any sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$ then	A. $A = B$ B. $B = C$ C. $A \neq C$ D. $A \neq B$
8	The quadratic equation $8 \sec^2 \theta - 6 \sec \theta + 1 = 0$ has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
9	Question Image	
10	Question Image	
11	In natural logarithm the base is	A. 1 B. 0 C. 10 D. e
12	If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$, then which expression defines the product of z_1 and z_2 ?	A. $36 + (-32)i$ B. $-36 + 32i$ C. $6 + (-11)i$ D. $0, +(-12)i$
13	$x^3 + 2x^2 - 3x + 5$ is _____	A. An equation B. A polynomial C. Proper rational fractions D. Improper rational fractions
14	The greater part of our knowledge, is based on	A. deduction B. induction C. conjunction D. disjunction
15	To draw conclusions from some experiments or few contacts only is called	A. deduction B. implication C. conjunction

C. convergence
D. induction

16 If the centre of the circle is the origin, then equation of the circle is

- A. $x^2 + y^2 = 0$
B. $2gx + 2fy - c = 0$
C. $x^2 + y^2 = r^2$
D. $gx + fy - c/2 = 0$

17 Question Image

18 The middle term(s) of $(a+x)^{11}$ is

- A. 6th term
B. 6th or 7th
C. 7th term
D. 6th and 7th

19 Every irrational number is

- A. A real number
B. A prime number
C. A natural number
D. An integer

20 Question Image