

ECAT (Pre-Eng) Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	If $f(x) = x^2 - x$ then $f(2)$ is	A. 4 B. 6 C. 2 D. 0
2	if the value of the sphere, $v = \frac{4}{3}\pi r^3$, then the which of the following statement is true?	A. r is the function of v B. v is the function of r C. π is independent variable D. None of these
3	$f(x) = 2^x + 3 \cdot 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
4	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
5	$\sec h x =$ _____	
6	Question Image	A. $\sin h x$ B. $\cos h x$ C. $\tan h x$ D. $\cot h x$
7	A function in which the variable appears as exponent is called:	A. An identity function B. A logarithmic function C. an exponential function D. A rational function
8	Question Image	A. $\frac{3}{4}$ B. r C. v D. None of these
9	Question Image	A. 0 B. 1 C. $\frac{1}{2}$
10	Question Image	
11	The function discontinuous at $x = 0$ is (I) $\tan x$ (II) $\cot x$ (III) $\sec x$ (iv) $\operatorname{cosec} x$	A. I & III B. I & IV C. II & IV D. II & III
12	$\sin h x =$ _____	
13	Question Image	
14	Question Image	
15	$f(x) = \sin x$ is:	A. an odd function B. an even function C. an implicit function D. an exponential function
16	Question Image	A. -1 B. 1 C. 2 D. -2
17	Which of the following function form 1 to itself are bi-jective	A. $F(x) = x + 3$ B. $F(x) = x^{\sup>5\</sup>}$ C. $F(x) = 3x + 2$ D. $F(x) = x^{\sup>2\</sup> + x}$
18	The domain and range of a trigonometric function can be allocate by their	A. graph B. Continuity C. Discontinuity D. Periods

19

Question Image

- A. $\sinh x$
- B. $\cosh x$
- C. $\operatorname{sech} x$
- D. $\operatorname{cosech} x$

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Question Image