ECAT Mathematics Chapter 17 Functions and Limits Online Test

Sr	Questions	Answers Choice
1	The behavior of trigonometric function is called	A. Continuity B. Discontinuity C. Periodicity D. Smoothness
2	The trigonometric function are continuous whenever	A. They are defined B. their limit exist C. Their period is given D. All are incorrect
3	The domain and range of a trigonometric function can be allocate by their	A. graph B. Continuity C. Discontinuity D. Periods
4	If f (x) is defined and continuous then f (x) is always	A. Rational function B. Trigonometric function C. Logarithmic function D. All are correct
5	The domain of y = cos-1 x is	A. -∞ < x < ∞ B. -1≤ x≤ 1 C. x≤ -1 or x ≥ 1 D. None of these
6	Point (2,0) lies on trigonometric function f(x)=_____;	A. sinx B. cosx C. tanx D. secx
7	f (x) = | x | is a/an	A. Injective function B. Bijective function C. Surjective function D. Implicit function
8	The function f : x→ y defined as f (x) =α∀x∈ X,α∈ y is called	A. Constant function B. Polynomial function C. Identity function D. Linear function
9	The range of y=x2 + 1 is the set of non-negative real numbers except	A. 0≤ y < 1 B. 0 < y < 1 C. 0≤ y≤ 1 D. 0 < y≤1
10	x = secθ,y = tanθ are the parametric equations of	A. Circle B. Hyperbola C. Ellipse D. parabola
11	Composition of functions is	A. Non-commutative (fg ≠ gf) B. non-associative [8(fh) ≠(8f)h] C. Commutative (fg = gf) D. f of-1≠ 1
12	If a tangent line touches the function y = f (x) in more than one point then y = f (x) is	A. Periodic B. Surjective C. Bijective D. Injective
13	An even function is symmetric about the line	A. y = x B. x = 0 C. y = -x D. y = 0
14	The range of the function f : x→ y is defined by	A. {x| y = f (x) ∀x∈ X ∧y∈y} B. {(x,y) |y = f (x)∀x∈ X} C. {y|y = f (x) ∀x∈ X ∧y∈y} D. Y
15	The only function which is both even and odd is	A. f(x) =α B. f(x) = x C. f(x) =0 D. Both A & B

16	The curve f(x,y) = 0 has a central symmetry if	A. f(-x,-y)=f(x,y) B. f(x,-y)=f(x,y) C. f(-x,y)=f(x,y) D. f(-x,-y)≠f(x,y)
17	The function discontinuous at x = 0 is (1) tan x (II) cot x (III) sec x (iv)cosec x)	A. I & III B. I & IV C. II & IV D. II & III
18	Domain of cosh x is	A. R B. R -{0} C. [1,∞) D. [0,∞)
19	The function f(x) =|x| is a/an_____function	A. Even B. Odd C. Both even as well as odd D. Neither even nor odd
20	If f (x) = 2x+1 then fof (x) = _____;	A. 4x+3 B. 2x +3 C. 4x +1 D. None of these
21	The set of points {(x,y)|y = f(x), ∀x∈} is called	A. Relation B. Graph of f C. Function D. All are correct
22	If f(α) = b2 and g (c) =d where c=b2 then (gof)(a) is	A. α B. c C. b D. d
23	Inverse of the function y-10x is	A. y=logx B. y=lnx C. x=10y D. x=10y
24	The range of function f(x)=-x2+2x-1 is	A. R B. (-∞,0] C. (-∞,1] D. [0,∞)
25	A rule that assigns to each elements x in X a unique element y in Y is called a _____	A. domain B. range C. function D. none of these
26	A rule or correspondence that assigns to each element x in X a unique element y in Y is called a function from	A. X to X B. X to Y C. Y to X D. none of these
27	A function from X to Y is written as	B. f : X to Y D. f : Y to Y
28	A function from X to X is denoted as	B. f : X to Y D. f : Y to Y
29	Question Image	A. x = f(y) B. y = f(x) C. x = f(x) D. y = f(y)
30	Question Image	A. range of f B. domain of f C. both (a) and (b) D. none of these
31	Question Image	A. images B. pre-images C. constants D. none of these
32	Question Image	A. image B. pre-image C. constant D. none of these
33	If y is an image of x under the function f, then we write	A. y = f(x) B. x = f(y) C. y = x D. none of these
	Question Image	A. f(x) = x² B. f(x²) = x

34	Question Image	C. f(x) = x D. none of these
35	If $f(x) = x^2$ then $f(0)$ is	A. 0 B. 1 C. 2 D. none of these
36	If $f(x) = x^2$ then $f(0)$ is	A. 0 B. 1 C. 2 D. none of these
37	If $f(x) = x^2$ then $f(-2)$ is	A. -2 B. 2 C. 4 D. -4
38	If $f(x) = x^2$ then $f(2)$ is	A. -2 B. 2 C. 4 D. -4
39	If $f(x) = (-x)^2$ then $f(-2)$ is	A. 0 B. 2 C. -4 D. 4
40	If $f(x) = -x^2$ then $f(-2)$ is	A. -2 B. 2 C. -4 D. 4
41	If $f(x) = x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
42	If $f(x) = -x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
43	If $f(x) = x^2 - x$ then $f(0)$ is	A. 0 B. 1 C. 2 D. 3
44	If $f(x) = x^2 - x$ then $f(1)$ is	A. 0 B. 1 C. 2 D. 3
45	If $f(x) = x^2 - x$ then $f(2)$ is	A. 4 B. 6 C. 2 D. 0
46	If $f(x) = x^2 - x$ then $f(-2)$ is	A. 4 B. 6 C. 2 D. 0
47	Question Image	A. 2 C. -2 D. none of these
48	Question Image	A. 2 B. 6
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51	Question Image	A. 2 B. -1 C. 8 D. not defined
52	Question Image	A. 0 B. 3 C. 9 D. -3
		A. 0

53	If f(x) = x^3- 2x^2+ 4x -1 then f(0) is	B. 1 C. -1 D. none of these
54	Question Image	A. -1 B. 1 C. 2 D. -2
55	If f(x) = x^3- 2x^2+ 4x -1 then f(2) is	A. 7 B. -16 C. 16 D. -9
56	If f(x) = cos x then f(0) is	A. 0 B. 1 C. 1/2
57	Question Image	A. 0 B. 1 C. 1/2
58	If f(x) = tan x then f(0) is	A. 0 B. 1 C. 1/2
59	Question Image	A. 0 B. 1 C. 1/2
60	Question Image	A. 0 B. 1 C. 2
61	Question Image	A. 0 B. 1 C. 2 D. 1/2
62	If f(x) = x + 1 then f(z^2-1) is	A. z² B. z²+ 2 C. z²- 2 D. none of these
63	If y=f(x) is a function then x is called	A. dependent variable B. independent variable C. constant D. none of these
64	If y=f(x) is a function then y is called	A. dependent variable B. independent variable C. constant D. none of these
65	f(x) = 2x^2+ 3x + 5 is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
66	f(x) = sin x + cos^{2}x is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
67	f(x) = log x + 3 is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
68	f(x) = 2^x+ 3 . 2^{2x}+ 5 is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
69	f(x) = C is	A. identity function B. constant function C. linear function D. quadratic function
70	Question Image	A. quadratic function B. constant function C. linear function D. exponential function
71	Question Image	A. quadratic function B. constant function C. trigonometric function D. linear function

72	f(x) = x is	A. trigonometric function B. exponential function C. quadratic function D. identify function
73	f(x) = 1 is	A. identity function B. constant function C. linear function D. quadratic function
74	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
75	In natural logarithm the base is	A. 1 B. 0 C. 10 D. e
76	f(x) = ax + b will be a constant function if	A. a = 1 , b = 1 B. a = 1 , b = 0
77	f(x) = ax + b will be an identity function if	A. a = 1 , b = 1 B. a = 1 , b = 0
78	sin h x = _____	
79	tan h x = _____	
80	sec h x = _____	
81	Question Image	A. sin h x B. cos h x C. tan h x D. cot h x
82	Question Image	A. sin h x B. cos h x C. tan h x D. cot h x
83	Question Image	A. sin h x B. cos h x C. sec h x D. cosec h x
84	Sin h^{-1}x = _____	
85	Question Image	
86	Question Image	
87	Question Image	
88	Question Image	
89	Question Image	
90	Question Image	A. 0 B. 1 C. -1 D. none of these
91	Question Image	
92	Question Image	
93	Question Image	
94	Question Image	
95	Question Image	
96	Question Image	
97	Question Image	
98	Question Image	
99	Question Image	
100	Question Image	

No.	Question	Options
101	Question Image	
102	Question Image	A. 0 B. 1 D. none of these
103	Question Image	A. 0 B. 1 D. -1
104	Question Image	A. 0 B. 1 C. -1 D. none of these
105	Question Image	A. 0 B. 1 D. -1
106	Question Image	
107	Question Image	
108	Question Image	A. [0,1[B. [0, 1] C.]0, 1[D. None of these
109	Question Image	A. 2 B. 4 C. 8 D. 12
110	Question Image	A. One-to-one and onto B. One-to-one but not on to C. Onto but not one-to-one D. Neither one-to-one nor onto
111	Question Image	A. π B. 2π C. $\pi/2$ D. None of these
112	The period $\sin^2\theta$ is	A. π^2 B. π C. 2π D. $\pi/2$
113	The period of the function $f(x) = \sin^4 x + \cos^4 x$ is	A. π B. $\pi/2$ C. 2π D. None of these
114	The periods of the function $f(x) = x[x]$ is	A. 1 B. 2 C. Non periodic D. None of these
115	π is the period of the function	A. $\lvert \sin x \rvert + \lvert \sin x \rvert$ B. $\sin^4 x + \cos x$ C. $\sin(\sin x) + \sin(\cos x)$ D. None of these
116	Which of the following function form 1 to itself are bi-jective	A. $F(x) = x + 3$ B. $F(x) = x^5$ C. $F(x) = 3x + 2$ D. $F(x) = x^2 + x$

#	Question	Options
117	Question Image	
118	Question Image	A. One-one but not onto B. One-one and onto C. Onto but not one-one D. Neither one-one nor onto
119	Question Image	A. -2 B. -1 C. 1 D. 2
120	If $f(x) = x^3 - 2x^2 + 4x - 1$, then $f(-2) = ?$	A. 0 B. -25 C. 5 D. 45
121	Question Image	A. 0 B. -2 C. 1 D. 4
122	$p(x) = 2x^4 - 3x^3 + 2x - 1$ is polynomial of degree	A. 1 B. 2 C. 3 D. 4
123	Which is not included in the domain of $\cos^{-1}x$	A. 0 B. 1 C. -1 D. 2
124	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = xy + 2$ D. All are
125	Question Image	
126	The domain of $f(x) = \log x$ is	A. $[0, \infty]$ B. $(0, \infty)$ C. $[0, \infty[$ D. $[\infty, \infty]$
127	A function $F(x)$ is called even if	A. $F(x) = F(-x)$ B. $F(x) = F(-x)$ C. $F(x) = -F(x)$ D. $2F(x) = 0$
128	The range of inequality $x + 2 > 4$ is	A. (-1, 2) B. (-2, 2) C. $(1, \infty)$ D. None
129	Question Image	A. 1 B. 0 C. -2

		D. 3
130	Graph of the question $x^2 + y^2 = 4$ is	A. A circle B. An ellipse C. A parabola D. A square
131	Domain of y = scs x is	A. All real numbers except $\pi/2 + n*\pi$ B. R C. All negative integers D. None of these
132	The area of circle of unit radius =	A. 0 B. 1 C. 4 D. π
133	Question Image	A. 0 B. 1 C. 8 D. ∞
134	Question Image	A. 3/4 B. r C. v D. None of these
135	Question Image	A. Does not exist because f is unbounded B. Is not attained even though f is bounded C. Is equal to 1 D. Is equal to -1
136	Question Image	A. R/[0,4] B. R/(0,4) C. (0,4) D. [0,4]
137	Question Image	A. (1,7/3) B. (1, 7/5) C. (1, 11/7) D. (1, 3/5)
138	Question Image	A. 1/8 B. 1/2 C. 1/4 D. 1/6
139	Question Image	A. 2 B. 1 C. 5 D. 0
140	if the value of the sphere, v $=4/3\pi r^2$, then the which of the following statement is true?	A. r is the function of v B. v is the function of π C. π is independent variable D. None of these
141	A function from A to B is denoted by	A. f: A→ B B. f: B → A C. f: → A :B D. f → A→ B
142	If a variable y dependents on a variable x in such a way that each value of x determines exactly one value of y, then we say that	A. x is function of y B. y is a function of x C. y is independent variable D. x is real valued function
143	The domain of y $=\sqrt{(x^2-9)}$ is	A. R B. (0 , +∞) C. (-∞ , -3) ∪ (3 , +∞) D. (0 ,∞)
144	In the function f: A□B, the elements of a are called	A. Images B. Pre-images C. ranges D. Parameters
		A. R

145	The domain the function : $f(x) = x^2$ is given by	B. Set of all non-negative Real numbers C. R⁻¹ D. None of these
146	The domain of the function $x/x^2 -4$ is given by	A. R B. R + 2 C. [R - (<u>+</u>2) D. R-4
147	If the domain of the function f: x□ $2x^3+ 1$ is {-1,2,3}, the range of the function is	A. {3,2,5} B. {1,3,9} C. {-1,-2,-3} D. {3,9,19}
148	_____ invented a symbolic way to write the statement "y is a function of x" as y= $\overline{f(x)}$	A. Leibniz B. Newton C. Euler D. None of these
149	Every relation, which can be represented by a linear equation in two variables, represents a	A. Relation B. Cartesian product C. Function D. Graph
150	The value of x which is unchanged by the mapping in the function defined by f ; x□ $x^2 + 5x - 5$ for x> 0 is	A. 1 B. 5 C. -5 D. -1
151	If x is an image of y under the function f. This can be written as	A. y = f(x) B. f(x) = 0 C. x = f(y) D. f(y) =0
152	What is range of the function g (x) =|x-3|?	A. [0 ,∞) B. (0 ,∞) C. (-∞ ,3] D. [0,∞)
153	The largest possible domain of the function: y=√(x) is:	A. (0 ,∞) B. 12 C. (3 , 12) D. (3 ,∞)
154	For $f(x) = x^2 + px +1$, if f(3) = 3 then P =	A. 3/7 B. -2/5 C. -7/5 D. -7/3
155	For f(x) = x2, what is the value of f(a) +f (-a) in terms of a?	A. 3a2 B. 2a2 C. 2a D. -7a
156	If the function y=2x -3, what is the preimage of 11?	A. 11 B. 7 C. 5 D. 2
157	if $f(x) = x^3 -3x^2 +5x -1$, then f(-√2)=	A. 7+7√2 B. 3+3√2 C. -7-7√2 D. -3-3√2
158	Express the perimeter P of square as a function of its area A?	A. P = 4√A B. P =√A C. P = 2A D. P =π√A
159	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
160	A function of the form p(x)/Q(x) is called:	A. Rational function B. Logarithmic function C. Exponential function D. Hyperbolic function
161	xy= 2 is:	A. a constant function B. an identity function C. an improper function D. implicit function
162	A function f is said to be an even if f(-x) =	A. 0 B. 1 C. f(x) D. -f(x)

| 163	$f(x) = \sin x$ is:	A. an odd function B. an even function C. an implicit function D. an exponential function
164	$f(x) = x^3$ is:	A. an odd function B. an even function C. an implicit function D. a quadratic funtion
165	$\cos h^2 x + \sin h^2 x$	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
166	$f(x) = x3-x/x2+1$ is :	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
167	$f(x) = 3x^4 -2x^2 + 7$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
168	$f(x) = 3x/x^2 + 1$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
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185	The function discontinuous at x = 0 is (1) tan x (II) cot x (III) sec x (iv)cosec x)	A. I & III B. I & IV C. II & IV D. II & III
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206	If $f(x) = x^2$ then $f(2)$ is	A. -2 B. 2 C. 4 D. -4
207	If $f(x) = (-x)^2$ then $f(-2)$ is	A. 0 B. 2 C. -4 D. 4
208	If $f(x) = -x^2$ then $f(-2)$ is	A. -2 B. 2 C. -4 D. 4
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229	Question Image	A. 0 B. 1 C. 2 D. 1/2
230	If $f(x) = x + 1$ then $f(z^2 - 1)$ is	A. z^2 B. $z^2 + 2$ C. $z^2 - 2$ D. none of these
231	If $y = f(x)$ is a function then x is called	A. dependent variable B. independent variable C. constant D. none of these
232	If $y = f(x)$ is a function then y is called	A. dependent variable B. independent variable C. constant D. none of these
233	$f(x) = 2x^2 + 3x + 5$ is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
234	$f(x) = \sin x + \cos^2 x$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
235	$f(x) = \log x + 3$ is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
236	$f(x) = 2^x + 3 \cdot 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function

		D. logarithmic function
237	f(x) = C is	A. identity function B. constant function C. linear function D. quadratic function
238	Question Image	A. quadratic function B. constant function C. linear function D. exponential function
239	Question Image	A. quadratic function B. constant function C. trigonometric function D. linear function
240	f(x) = x is	A. trigonometric function B. exponential function C. quadratic function D. identify function
241	f(x) = 1 is	A. identity function B. constant function C. linear function D. quadratic function
242	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
243	In natural logarithm the base is	A. 1 B. 0 C. 10 D. e
244	f(x) = ax + b will be a constant function if	A. a = 1 , b = 1 B. a = 1 , b = 0
245	f(x) = ax + b will be an identity function if	A. a = 1 , b = 1 B. a = 1 , b = 0
246	sin h x = _____	
247	tan h x = _____	
248	sec h x = _____	
249	Question Image	A. sin h x B. cos h x C. tan h x D. cot h x
250	Question Image	A. sin h x B. cos h x C. tan h x D. cot h x
251	Question Image	A. sin h x B. cos h x C. sec h x D. cosec h x
252	Sin h^{-1}x = _____	
253	Question Image	
254	Question Image	
255	Question Image	
256	Question Image	
257	Question Image	
258	Question Image	A. 0 B. 1 C. -1 D. none of these
259	Question Image	
260	Question Image	
261	Question Image	

262	Question Image	
263	Question Image	
264	Question Image	
265	Question Image	
266	Question Image	
267	Question Image	
268	Question Image	
269	Question Image	
270	Question Image	A. 0 B. 1 D. none of these
271	Question Image	A. 0 B. 1 D. -1
272	Question Image	A. 0 B. 1 C. -1 D. none of these
273	Question Image	A. 0 B. 1 D. -1
274	Question Image	
275	Question Image	
276	Question Image	A. [0,1[B. [0, 1] C.]0, 1[D. None of these
277	Question Image	A. 2 B. 4 C. 8 D. 12
278	Question Image	A. One-to-one and onto B. One-to-one but not on to C. Onto but not one-to-one D. Neither one-to-one nor onto
279	Question Image	A. <i>π</i> B. <i style="text-align: center;">2π</i> C. <i style="text-align: center;">π/2</i> D. None of these
280	The period $\sin^2\theta$ is	A. <i style="text-align: center;">π²</i> B. <i style="text-align: center;">π</i> C. 2<i style="text-align: center;">π</i> D. <i style="text-align: center;">π/2</i>
281	The period of the function f(x) = $\sin^4 x + \cos^4 x$ is	A. <i>π</i> B. <i>π</i>/2 C. 2<i>π</i> D. None of these

282	The periods of the function f(x) = x[x] is	A. 1 B. 2 C. Non periodic D. None of these
283	π is the period of the function	A. |sin x| + |sin x| B. $\sin^4 x + \cos x$ C. sin (sin x) + sin (cos x) D. None of these
284	Which of the following function form 1 to itself are bi-jective	A. F(x) = x + 3 B. $F(x) = x^5$ C. F(x) = 3x + 2 D. $F(x) = x^2 + x$
285	Question Image	
286	Question Image	A. One-one but not onto B. One-one and onto C. Onto but not one-one D. Neither one-one nor onto
287	Question Image	A. -2 B. -1 C. 1 D. 2
288	If f(x) = x^3 - $2x^2$ + 4x -1, then f(-2) = ?	A. 0 B. -25 C. 5 D. 45
289	Question Image	A. 0 B. -2 C. 1 D. 4
290	p(x) = $2x^4$ - $3x^3$ + 2x - 1 is polynomial of degree	A. 1 B. 2 C. 3 D. 4
291	Which is not included in the domain of $\cos^{-1}x$	A. 0 B. 1 C. -1 D. 2
292	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = xy + 2$ D. All are
293	Question Image	
294	The domain of f(x) = log x is	A. $[0, \infty]$ B. $(0, \infty)$ C. $[0, \infty)$ D. $[\infty, \infty]$
		A. F(x) = F (-x) B. F(x) = F(-x)

295	A function F(x) is called even if	B. F(x) = F(-x) C. F(x) = -F(x) D. 2F(x) = 0
296	The range of inequality x + 2 > 4 is	A. (-1, 2) B. (-2, 2) C. (1, ∞) D. None
297	Question Image	A. 1 B. 0 C. -2 D. 3
298	Graph of the question $x^2 + y^2 = 4$ is	A. A circle B. An ellipse C. A parabola D. A square
299	Domain of y = scs x is	A. All real numbers except $\pi/2 + n*\pi$ B. R C. All negative integers D. None of these
300	The area of circle of unit radius =	A. 0 B. 1 C. 4 D. π
301	Question Image	A. 0 B. 1 C. 8 D. ∞
302	Question Image	A. 3/4 B. r C. v D. None of these
303	Question Image	A. Does not exist because f is unbounded B. Is not attained even though f is bounded C. Is equal to 1 D. Is equal to -1
304	Question Image	A. R/[0,4] B. R/(0,4) C. (0,4) D. [0,4]
305	Question Image	A. (1,7/3) B. (1, 7/5) C. (1, 11/7) D. (1, 3/5)
306	Question Image	A. 1/8 B. 1/2 C. 1/4 D. 1/6
307	Question Image	A. 2 B. 1 C. 5 D. 0
308	if the value of the sphere, v =4/3πr^2, then the which of the following statement is true?	A. r is the function of v B. v is the function of π C. π is independent variable D. None of these
309	A function from A to B is denoted by	A. f: A$\rightarrow$ B B. f: B $\rightarrow$ A C. f: $\rightarrow$ A :B D. f $\rightarrow$ A$\rightarrow$ B
		A. x is function of v

#	Question	Options
310	If a variable y dependents on a variable x in such a way that each value of x determines exactly one value of y, then we say that	A. x is function of y B. y is a function of x C. y is independent variable D. x is real valued function
311	The domain of $y = \sqrt{(x^2-9)}$ is	A. R B. $(0, +\infty)$ C. $(-\infty, -3) \cup (3, +\infty)$ D. $(0, \infty)$
312	In the function f: A□B, the elements of a are called	A. Images B. Pre-images C. ranges D. Parameters
313	The domain the function : $f(x) = x^2$ is given by	A. R B. Set of all non-negative Real numbers C. R⁻¹ D. None of these
314	The domain of the function $x/x^2 - 4$ is given by	A. R B. R + 2 C. [R - (<u>+</u>2) D. R-4
315	If the domain of the function f: x□ $2x^3+ 1$ is {-1,2,3}, the range of the function is	A. {3,2,5} B. {1,3,9} C. {-1,-2,-3} D. {3,9,19}
316	_____ invented a symbolic way to write the statement "y is a function of x" as y= f(x)	A. Leibniz B. Newton C. Euler D. None of these
317	Every relation, which can be represented by a linear equation in two variables, represents a	A. Relation B. Cartesian product C. Function D. Graph
318	The value of x which is unchanged by the mapping in the function defined by f ; x□ x^2 + 5x - 5 for x> 0 is	A. 1 B. 5 C. -5 D. -1
319	If x is an image of y under the function f. This can be written as	A. y = f(x) B. f(x) = 0 C. x = f(y) D. f(y) =0
320	What is range of the function g (x) =|x-3|?	A. $[0, \infty)$ B. $(0, \infty)$ C. $(-\infty, 3]$ D. $[0, \infty)$
321	The largest possible domain of the function: $y=\sqrt{(x)}$ is:	A. $(0, \infty)$ B. 12 C. (3, 12) D. $(3, \infty)$
322	For $f(x) = x^2$ + px +1, if f(3) = 3 then P =	A. 3/7 B. -2/5 C. -7/5 D. -7/3
323	For f(x) = x2, what is the value of f(a) +f (-a) in terms of a?	A. 3a2 B. 2a2 C. 2a D. -7a
324	If the function y=2x -3, what is the preimage of 11?	A. 11 B. 7 C. 5 D. 2
325	if $f(x) = x^3 -3x^2 +5x -1$, then f(-√2)=	A. 7+7√2 B. 3+3√2 C. -7-7√2 D. -3-3√2
326	Express the perimeter P of square as a function of its area A?	A. P = 4√A B. P =√A C. P = 2A D. P =π√A
327	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

328	A function of the form p(x)/Q(x) is called:	A. Rational function B. Logarithmic function C. Exponential function D. Hyperbolic function
329	xy= 2 is:	A. a constant function B. an identity function C. an improper function D. implicit function
330	A function f is said to be an even if f(-x) =	A. 0 B. 1 C. f(x) D. -f(x)
331	f(x) = sin x is:	A. an odd function B. an even function C. an implicit function D. an exponential function
332	f(x) = x^3 is:	A. an odd function B. an even function C. an implicit function D. a quadratic funtion
333	$\cos h^2 x + \sin h^2 x$	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
334	f(x) = x3-x/x2+1 is :	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
335	f(x) = $3x^4$ -$2x^2$ + 7 is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
336	f(x) = $3x/x^2$ + 1 is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd