

## ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	
2	Which of the following is a factor of $x^3$ - $3x^2$ + $2x$ - $6$	A. x+2 B. x+3 C. x-3 D. x-4
3	sin2 π/6 + sin2 π/3 + tan2 π/4 =;	A. 1 B. 2 C. 3 D. 4
4	Roots of the equation $x^2$ - 7x + 10 = 0 are	A. {2, 5} B. {-2, 5} C. {2,5} D. {-2,-5}
5	The law of sines can be used to solve	A. Right angle triangle B. Isosceles triangle C. oblique triangle D. haxagon
6	Question Image	A. additive property B. multiplicative property C. additive inverse D. additive identity
7	If a <sub>n</sub> = 2n -3, write the first four terms	A3, -1, 1, 3 B. 1, 3, 5, 7 C1, 1, 3, 5 D. None of these
8	Question Image	
9	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
10	The st. lines whose direction cosines satisfy al + bm + cn = 0, fmn + gnl + hlm=0 are perpendicular if	
11	x = r2, y = 1 are the parametric equation of	A. Circle B. Hyperbola C. Ellipse D. Parabola
12	Question Image	A. 2 B. 5 C. 7 D. None of these
13	Question Image	
14	Question Image	
15	Question Image	A. 0 B. 1 C1 D. 2
16	Question Image	
17	Question Image	A. A variable B. A constant C. 0
''	GEOGLOTT HIMBO	D. None of these
18	Sand falls from a tube in such a way that it forms a cone whose height is always 4/3 times the radius of its base and radius of the base increases at the rate of 1/8 cm/sec. When this radius is 1 meter, the rate at which the amount of sand increases is	
		A. p <sup>2</sup> + c/a

19	If a $(p + q)^2$ + bpq +c = 0 and a $(p + r)^2$ + 2 bpr + c = 0, then qr equals	B. p <sup>2</sup> + a/c C. p <sup>2</sup> + c/a D. p <sup>2</sup> - c/a
20	A series consisting of an unlimited number of terms is termed as an	<ul><li>A. Finite sequence</li><li>B. Infinite sequence</li><li>C. <sup>Infinite series</sup></li><li>D. geometric sequence</li></ul>