ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	B. tan 3x + c C. cot 3x + c D. - cot 3x + c
2	∫Sec^2 (ax + b) dx is equal to:	A. tan² (ax + b) B. 1/a tan² (ax + b) C. 1/atan (ax +b) D. tan (ax + b)
3	If $a_1$and r are the first term and the common ratio respectively then (n + 1)th term of the G.P. is	A. 0 B. a₁rⁿ⁻¹ C. a₁rⁿ⁺¹ D. a₁rⁿ
4	Question Image	A. 0 B. 1 C. 2 D. 3
5	If n is any positive integer then n! > $n^2$for	
6	If D = {a} , the P(D) =	A. {a} B. <!--[if gte msEquation 12]><m:oMathPara><m:oMath><m:r>∅</m:r></m:oMath></m:oMathPara><![endif]--><!--[if !msEquation]--><!--[if gte vml 1]><v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5l@4@11@9@11@9@5xe" filled="f" stroked="f"> <v:stroke joinstyle="miter"/> <v:formulas> <v:f eqn="if lineDrawn pixelLineWidth 0"/> <v:f eqn="sum @0 1 0"/> <v:f eqn="sum 0 0 @1"/> <v:f eqn="prod @2 1 2"/> <v:f eqn="prod @3 21600 pixelWidth"/> <v:f eqn="prod @3 21600 pixelHeight"/> <v:f eqn="sum @0 0 1"/> <v:f eqn="prod @6 1 2"/> <v:f eqn="prod @7 21600 pixelWidth"/> <v:f eqn="sum @8 21600 0"/> <v:f eqn="prod @7 21600 pixelHeight"/> <v:f eqn="sum @10 21600 0"/> </v:formulas> <v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect"/> <o:lock v:ext="edit" aspectratio="t"/> </v:shapetype><v:shape id="_x0000_i1025" type="#_x0000_t75" style='width:6.75pt; height:14.25pt'> <v:imagedata src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip1/01/clip_image001.png" o:title="" chromakey="white"/> </v:shape><![endif]--><!--[if !vml]--><img width="9" height="19" src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip1/01/clip_image002.png" v:shapes="_x0000_i1025" style="font-family: Calibri, sans-serif; font-size: 11pt;">∅<!--[endif]--><!--[endif]--><o:p></o:p> C. {∅,{a}} D. {∅,a}
7	Question Image	
8	Question Image	A. A complex number B. A rational number C. A natural number D. An irrational number
9	The law of sines can be used to solve oblique triangle when following information is given:	A. Two angles and a side B. Two sides and an angle opposite one of the given sides C. Two sides and the angle between two sided D. Option a and b
10	An A.P., a G.P. and a H.P. have the same first and last terms and the same odd numbers of terms, the middle terms of the three series are in	A. A.P. B. G.P. C. H.P. D. None of these
11	If the elevation of the sun is 30°, then the length of the shadow cast by a tower of 150 ft height is	
12	O is _____	A. A positive integer B. A negative integer C. A natural number D. An integer
13	10 is a even number or 0 is a natural number, then truth value of this disjunction is	A. false B. true C. not discussed

		D. negation of first
14	For trival solution |A| is	A. A B. |A| is non zero C. A = 0 D. None of these
15	Question Image	A. sin h x B. cos h x C. tan h x D. cot h x
16	If A is a set then any subset R of A x A is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
17	Period of cot x is _____	
18	The minimum value of the quadratic function f(x) = x2 +6x -2, is	A. 11 B. 6 C. -11 D. 13
19	Question Image	A. cos 2x + c B. - cos 2x + c C. tan 2x + c D. cot 2x + c
20	There are 50 students in a class out of these 38 used desktop computer 16 out of these used laptop. It is noted that five students neither used laptop of computer. The students having both laptop and computer are A. Based on the information find out the greatest value of A.	A. 16 B. 8 C. 4 D. 0