ECAT Pre Engineering MCQ's Test For Mathematics Full Book

Sr	Questions	Answers Choice
1	Te order of the differential equation of all conics whose axes coincide with the axes of co-ordinates is	A. 2 B. 3 C. 4 D. 1
2	Question Image	A. 8 B. 1/56 C. 56 D. None of these
3	The identity elements with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
4	$7^{2n} + 3^{n-1} \cdot 2^{3n-3}$ is divisible by	A. 24 B. 25 C. 9 D. 13
5	If A is a non-singular matrix then adj A is	A. Non-singular B. Symmetric C. Singular D. Non defined
6	Question Image	
7	Question Image	
8	The area of a sector of a circular region of radius r is	A. $2\pi r$ B. πr^2 C. $1/2 \pi r^2$ D. $\pi/6$
9	The 6th term of the sequence 7,9,12,16......is	A. 27 B. 32 C. 20 D. 19
10	Question Image	A. 56 B. 7 C. 8 D. 8/7
11	If $n \in Z+$ then $(a+x)n$ is a/an	A. Finite series B. Convergent series C. Infinite series D. Divergent series
12	Question Image	A. conclusion B. consequent C. hypothesis D. conditional
13	The difference of two consecutive terms of an A.P. is called _____	A. General term B. Common ratio C. Common difference D. None of these
14	If a +b +c =0 then which of the following is true	A. a =b =c =0 B. a,b =b,c =c,a C. a xb=b xc =c xa D. None
15	Question Image	A. hypothesis B. implication C. consequent D. conditional
16	If Z = (1,2), then Z^{-1}= ?	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)

17	n(n-1)(2n-1), for all natural numbers n, is divisible by	A. 12 B. 6 C. 2 D. 18
18	Question Image	D. none of these
19	A bag contains 7 whit, 5 black and 4 rd balls. If two balls are drawn at random from the bag, the probability that they are not of the same color is	A. 73 / 120 B. 83 / 120 C. 67 / 120 D. 43 / 120
20	Question Image	