Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A square is inscribed in the circle $x^2 + y^2 - 2x + 4y + 3 = 0$. Its sides are parallel to the co-ordinate axes. Then one vertex of the square is	
2	$i =$	
3	Question Image	A. 2 B. 4 C. 8 D. 12
4	Which of the following has the same value as $i113$	A. i B. -1 C. -i D. 1
5	Question Image	A. 0 B. 2 C. 4/3 D. 5/3
6	In R the right cancellation property w.r.t. addition is	
7	1/3 is _____	A. A prime number B. An integer C. A rational number D. An irrational number
8	Question Image	
9	If (0, 0) and (0, -1) are end points of a diameter, then the equation of the circle is	
10	The term independent of x is the expansion $(x^3 + 1/x)^{12}$	A. 295 B. 495 C. 395 D. 722
11	If the matrices A and B are conformable for multiplication then $(AB)^t =$ _____	A. AB B. $A^t B^t$ C. $B^t A^t$ D. $A^t B$
12	Question Image	
13	Question Image	
14	π is _____	A. A complex number B. A rational number C. A natural number D. An irrational number
15	Question Image	
16	The length of the tangent from (2, 1) to the circle $x^2 + y^2 + 4y + 3 = 0$ is	
17	Range of cot x is _____	A. [-1, 1] B. R C. Negative real numbers D. R - {x	- 1 < x < 1}
18	If n € N , then n(n+3) is always	A. Multiple of 3 B. Multiple of 6 C. odd D. even
19	Water seeps out of a conical filter at eh constant rate of 5 cm/sec. the height of the cone of water in the filter is 15 cm. the height of the filter is 20 cm and radius of the base is 10 cm. the rate at which the height of the water decreases is	
20	Question Image	