

## GAT Subject Mathematics MCQ's Test

Cr.	Quanting	Anguara Chaice
Sr	Questions	Answers Choice
1	$\omega^n$ = ?, when n = 3k	A. 0 B. ω C. 1 D. 1 / ω
2	The range of inequality x + 2 > 4 is	A. (-1,2) B. (-2,2) C. (1,∞) D. None
3	A die is thrown what is the probability that there is a prime number on the top?	A. 1/2 B. 1/3 C. 1/6 D. 2/3
4	If $f_1(x)$ and $f_2(x)$ are any two anti derivatives of a function $F(x)$ then the value of $f_1(x) = f_2(x)$	A. A variable B. A constant C. Undefined D. Infinity
5	The associative angle of 280 <sup>0</sup> is	A. 100 <sup>o</sup> B. 10 <sup>o</sup> C. 80 <sup>o</sup> D80 <sup>o</sup>
6	$(x+2)^2 = x^2 + 4x + 4$ is	A. 1 B. 2 C. 3 D. 4
7	If $y = (ax)^m + b^m$ , then dy/dx equals	A. m (ax) <sup>m</sup> x <sup>m- 1</sup> B. ma <sup>m</sup> x <sup>m- 1</sup> C. m a <sup>m</sup> x <sup>m- 1</sup> D. m a <sup>m</sup> x <sup>m- 1</sup>
8	The nth term in G.P 3,-6,12, is	A. 25, 20 B. 20, 10 C. 20, 5 D. 15, 10
9	The circle $(x-2)^2 + (y+3)^2 = 4$ is not concentric with the circle	A. (x-2) <sup>2</sup> + (y + 3)2 =9 B. (x+2) <sup>2</sup> + (y - 3)2 + (y - 3)2 + (y + 3)2 =5
10	Tan (π + Tan <sup>-1</sup> x) =?	A. Tan x B. X Cx D. Cot <sup>-1</sup> x
11	Cse π/3	A. 2 B. 1 C. 0 D. 2/√3
12	The axis of the parabola $y^2 = 4ax$ is	A. x = 0 B. Y = 0 C. X = y D. X = -y
13	$1/x^2$ -1 = ? (in case of making partial fraction)	A. Ax +B/x <sup>2</sup> -1 B. A/x + B/ x- 1 C. A/ x+1 + B/x-1 D. None
		A. 0

15If the 9th tern of A.P is 8 and the 4th term is 20. then the first term isA. 1 B. 2 C2 D116The sum of the series 1+5+9+13+17+21+25+29 is:A. 10 cm B. 20 cm C. 30 cm D. 40 cm17Period of Sin 2x =A. $\pi$ B. $4\pi$ C. $2\pi\pi$ D. $2\pi$ 18The number of ways in which we can courier 5 packets to 10 cities isA. $2 \times 5 < \sup > 0 <  sup $	14	If f (x) = $x/x^2$ - 4 then which is not included in the domain of f(x)	B2 C. 1 D. 4
16       The sum of the series 1+5+9+13+17+21+25+29 is:       B. 20 cm C. 30 cm D. 40 cm         17       Period of Sin 2x =       A. π B. 4π C. 2nπ D. 2π         18       The number of ways in which we can courier 5 packets to 10 cities is       A. 2 x 5 <sup>o</sup> B. 5 <sup>10</sup> C. 10 <sup>5</sup> D. 2 <sup>10</sup> D. 2 <sup>10</sup> A. 3/4 B. r C. v D. π         19       In the function $v = 4/3 \pi r^3$ , V is a function of       A. 3/4 B. r C. v D. π         20       If $\sin \theta = 3/5 \cos \theta =$ A. 1/2 B. 3/5 C. 4/5	15	If the $9^{th}$ tern of A.P is 8 and the $4^{th}$ term is 20. then the first term is	B. 2 C2
17 Period of Sin 2x = $\frac{B. 4\pi}{C. 2n\pi}$ 18 The number of ways in which we can courier 5 packets to 10 cities is $\frac{A. 2 \times 5 < sup > o < /sup > B. 5 < sup > 10 < /sup > C. 10 < sup > 5 < /sup > D. 2 < sup > 10 < /sup > D. 2 < sup > 10 < /sup > D. \frac{A. 3/4}{B. r} 19 In the function v = 4/3 \pi r^3, V is a function of \frac{A. 3/4}{D. \pi} 20 If \sin \theta = 3/5 \cos \theta = \frac{A. 1/2}{B. 3/5} 20 If \sin \theta = 3/5 \cos \theta = \frac{B. 4\pi}{C. 2\pi} 21 A. \frac{A. 1}{2} 22 B. \frac{A. 1}{2} 23 B. \frac{A. 1}{2}$	16	The sum of the series 1+5+9+13+17+21+25+29 is:	B. 20 cm C. 30 cm
The number of ways in which we can courier 5 packets to 10 cities is  B. $5 < \sup > 10 < \sup > 0 < 0.10 < \sup > 0.2 < \sup > 10 < \sup > 0.2 < \sup > 10 < \sup > 0.2 < \sup > 10 < \sup > 0.2 < \sup > 0.2 < \sup > 10 < \sup > 0.2 < \sup > 0.2$	17	Period of Sin 2x =	B. 4π C. 2nπ
In the function $v = 4/3 \pi r^3$ , V is a function of	18	The number of ways in which we can courier 5 packets to 10 cities is	B. 5 <sup>10</sup> C. 10 <sup>5</sup>
20 If $\sin \theta = 3/5 \cos \theta =$ B. 3/5 C. 4/5	19	In the function $v = 4/3 \pi r^3$ , V is a function of	B. r C. v
D. 1	20	If $\sin \theta = 3/5 \cos \theta =$	B. 3/5