

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The function discontinuous at $x = 0$ is (I) $\tan x$ (II) $\cot x$ (III) $\sec x$ (iv) $\operatorname{cosec} x$	A. I & III B. I & IV C. II & IV D. II & III
2	Every irrational number is	A. A real number B. A prime number C. A natural number D. An integer
3	H.M. between 3 and 7 is	
4	If P is a proposition then its negative is denoted by	
5	The square matrix A is skew Hermitian when $(A)' =$	A. A B. A' C. $-A$ D. A
6	Question Image	
7	graph of trigonometric function $y = \sec x$ does not meet	A. x - axis B. y -axis C. both axis D. None of these
8	A number A is called the arithmetic mean between a and b if a, A, b is _____	A. Arithmetic sequence B. Geometric sequence C. Harmonic sequence D. Arithmetic sequence
9	Question Image	
10	If A and B are skew-symmetric then $(AB)t$ is	A. At Bt B. AB C. -AB D. BA
11	$\cos(a + \beta) - \cos(a - \beta) =$ _____;	A. $2\cos a \cos \beta$ B. $2\sin a \cos \beta$ C. $-2\sin a \cos \beta$ D. $-2\sin a \sin \beta$
12	The series obtained by adding the terms of an arithmetic sequence is called the	A. Infinite series B. Harmonic series C. Geometric series D. Arithmetic series
13	Question Image	A. $(a + b)c = a \cdot c + bc$ B. $a + b = b + a$ C. $(a + b) + c = a + (b + c)$ D. $a(b + c) = ab + ac$
14	A point of a solution regions where two of its boundary lines intersect, is called:	A. Vertex of the solution B. Feasible point C. Point of inequality D. Null point of the solution region
15	The distance between the points (2,3) and (3,2) is	A. 5 C. 2 D. 10
16	If $a(p + q)^2 + bpq + c = 0$ and $a(p + r)^2 + 2bpr + c = 0$, then qr equals	A. $\frac{p^2 + c/a}{a}$ B. $\frac{p^2 + c/a}{a}$ C. $\frac{p^2 + c/a}{a}$ D. $\frac{p^2 + c/a}{a}$
17	Question Image	A. an A.P. B. a G.P. C. a H.P. D. None of these
18	The value of x and y when $(x + iy)^2 = 5 - 4i$	A. $x = 2, y = -1$ B. $x = -2, y = 1$ C. $x = 2, y = 1$ D. $x = -2, y = -1$

C. $x = 2, y = 2$
D. $x = 2, y = 2$

19 The expansion of $(1 + 2x)^{-2}$ is valid if

- A. $|x| < 1/2$
B. $|x| < 1$
C. $|x| < 2$
D. $|x| < 3$

20 The area of a sector with central angle of 0.5 radians in a circular region whose radius is 2m is