


Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$x = 1$ is in the solution of the inequality	A. $x + 1 > 0$ B. $x - 2 > 0$ C. $3x - 1 < 0$ D. $x + 2 < 0$
2	Every real number is	A. A complex number B. A rational number C. A natural number D. A prime number
3	$\sin(\pi/2 + \theta) = \underline{\hspace{2cm}}$;	A. $\sin\theta$ B. $\cos\theta$ C. $-\sin\theta$ D. $-\cos\theta$
4	Question Image	A. A = C B. A = B C. B = C D. None of these
5	Question Image	
6	Question Image	
7	The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is	
8	Which of the following is a vector.	A. distance B. temperature C. energy D. acceleration
9	The 10th common term between the series $3+7+11+\dots$ and $1 + 6 + 11 + \dots$ is	A. 191 B. 193 C. 211 D. None of these
10	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
11	Question Image	A. Parallel to the plane B. At right angles to the plane C. Lies in the plane D. Meet the plane obliquely
12	The mid point of the line segment joining the points (4,0) and (0,4) is	A. (4,4) B. (2,2) C. (-4,-4) D. (-2,-2)
13	$(0.90)^{1/2}$ is equal to	A. 0.99 B. 0.90 C. 0.80 D. 0.88
14	Question Image	A. $3x^{>2} + 2$ B. $3x^{>2} + 2x + 3$ C. $x^{>3} + x^{>2}$ D. none of these
15	A card is drawn from a pack of cards numbered 1 to 52, the probability that the number on the card is a perfect square is	A. $1/13$ B. $2/13$ C. $7/52$ D. None of these
16	The fifth term of the sequence $a_n = 2n + 3$ is _____	A. 13 B. -13 C. 8 D. 3
17	The line $y = 4x + c$ touches the hyperbola $x^2 - y^2 = 1$ if and only if	A. $c = \pm\sqrt{2}$ B. $c = 0$ C. $c = \pm\sqrt{17}$ D. $c = \pm\sqrt{5}$

D. $C = \pm \sqrt{15}$

18 If $y = 2x$, then

- A. $y^1 - \ln 2y = 0$
- B. $y^2 - (\ln 2)^2 y = 0$
- C. $y^2 - (\ln 2)y^1 = 0$
- D. All are correct

19 

- A. nC_r
- B. ${}^{n+1}C_{r+1}$
- C. ${}^nC_{r+1}$
- D. None

20 The centre of the circle $x^2 + y^2 - 2fx - 2gy + x = 0$ is

- A. $(-g, -f)$
- B. (g, f)
- C. (f, g)
- D. $(-f, -g)$