

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Sin 90° = _____	A. -1 B. 0 C. 1 D. Undefined
2	The set of all antiderivatives of $f(x) = \int f(x) dx$ is the	A. Definite integral B. Indefinite integral C. Integral D. Area
3	If $\alpha, \beta$ are the roots of the equation $x^2 - 8x + p = 0$ and $\alpha^2 + \beta^2 = 40$ , then value of $p$ is	A. 8 B. 12 C. 10 D. 14
4	Question Image	A. A B. B C. U D. None of these
5	Question Image	D. none of these
6	The period of the function $\csc x/4$ is	A. $4x$ B. $\pi/4$ C. $8\pi$ D. $\pi/8$
7	if $f(x) = x^3 - 3x^2 + 5x - 1$ , then $f(-\sqrt{2}) =$	A. $7+7\sqrt{2}$ B. $3+3\sqrt{2}$ C. $-7-7\sqrt{2}$ D. $-3-3\sqrt{2}$
8	Question Image	
9	In a quadratic equation with leading co-efficient 1, a student reads the co-obtain the roots as -15 and -4. The correct roots are	A. 6, 10 B. -6, -10 C. 8, 8 D. -8, -8
10	Question Image	D. none of these
11	A line segment whose end points lie on a circle is called	A. The secant of the circle B. The arc of the circle C. The chord of the circle D. The circumference of the circle
12	Which is the proper rational function	
13	Question Image	
14	$ax^2 + 2hxy + by^2 + 2gx + 2fy + c = 0$ may represent an ellipse if	A. $h^2 - ab < 0$ B. $h^2 - ab \neq 0$ C. $h^2 - ab = 0$ D. $h^2 - ab > 0$
15	The domain of the principle sine function is	
16	The value of $\cos(\cos^{-1} 1/2)$ is	A. 1/2 B. $\sqrt{3}/2$ C. -1/2 D. $1/\sqrt{2}$
17	$w^{-1} =$ _____	A. 0 B. 1 C. w D. $w^{-2}$
18	$1^0 =$ _____	A. 1.5 rad B. 0.5 rad C. 0.175 rad D. None of these
		A. 2nd

19 If the exponent in the binomial expansion is 6, then the middle term is

- B. 3rd
- C. 4th
- D. 5th

20 The synthetic division method is only used to divide a polynomial by

- A. quadratic equation
- B. binomial
- C. linear equation
- D. monomial