

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The angle between the vectors $\underline{u} = [-3, 5]$ and $\underline{v} = [6, -2]$ is:	A. $\pi/2$ B. $-3\pi/2$ C. π D. None of these
2	Question Image	
3	Question Image	D. none of these
4	The first three terms in the expansion of $(1 + x)^{-1}$ are	A. $1 + x + x^2$ B. $1 - x - x^2$ C. $-1 - x + x^2$ D. $1 - x + x^2$
5	If A is a non singular matrix then $A^{-1} =$ _____	
6	Question Image	A. $-a - b - c$ B. 1 C. 0 D. -1
7	Question Image	A. 5 B. 20 C. 9 D. 4
8	Question Image	
9	An equation of the form $ax + by = k$ is homogeneous linear equation when:	
10	Question Image	
11	The set $\{x + iy \mid x, y \in \mathbb{Q}\}$ forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Both addition and multiplication
12	Question Image	
13	Zero is	A. An irrational number B. A rational number C. A negative integer D. A positive number
14	Question Image	A. square root function B. identity function C. linear function D. quadratic function
15	Question Image	A. An ellipse B. A parabola C. A circle D. A hyperbola
16	Question Image	A. A B. B C. U D. None of these
17	The line joining the center of a circle to the midpoint of the chord is	A. Perpendicular to the tangent B. Perpendicular to the normal C. Perpendicular to the chord D. Perpendicular to the chord
18	The foot of perpendicular from (α, β) on $y = 0$ is	A. (α, β) B. $(0, \beta)$ C. $(\alpha, 0)$ D. $(0, 0)$

18 The foot of perpendicular from (α, β, γ) on y-axis is

- β
- C. $(0, 0, \gamma)$
- D. $(0, 0, 0)$

19 If $x - 2$ is a factor of $ax^2 - 12x + a = 2a$, then $a =$ _____

- A. -5
- B. 5
- C. 0
- D. 1

20 

- A. a^x
- B. $a^{\ln a}$