

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The eccentricity of the parabola $y^2 = -8x$ is	A. -2 B. 2 C. -1 D. 1
2	Question Image	
3	Question Image	A. $a \cos(ax + b) + c$ B. $-a \cos(ax + b) + c$
4	Question Image	
5	$2\pi$ is the period of	A. $\sin x$ B. $\tan x$ C. $\cot x$ D. all circular function
6	$\sin^{-1}(-x) =$	A. $\cos^{-1} \frac{1}{x}$ B. $-\sin^{-1} x$ C. $\cot^{-1} x$ D. None of these
7	When rational fraction is separated into partial fractions, the result is	A. an identity B. A fraction C. A partial sum D. Improper fraction
8	$\cos(a + \beta) - \cos(a - \beta) =$ _____;	A. $2\cos a \cos \beta$ B. $2\sin a \cos \beta$ C. $-2\sin a \cos \beta$ D. $-2\sin a \sin \beta$
9	Question Image	
10	The remove the term involving $xy$ , from $7x^2 - 6\sqrt{3}xy + 13y^2 - 16 = 0$ the angel of rotation is	A. $\theta = 30^\circ$ B. $\theta = 45^\circ$ C. $\theta = 60^\circ$ D. $\theta = 75^\circ$
11	If $n$ is add the expansion $(a + x)^n$ has middle terms	A. 2 B. 3 C. 4 D. 5
12	If $(0, 0)$ and $(-1, 0)$ are end points of a diameter, then the equation of the circle is	
13	Question Image	
14	The coefficient of the second term of $(a+b)^4$ is	A. 1 B. 9 C. 3 D. 5
15	If the circumference of a circle is divided into 360 congruent parts, the angle subtended by one part at the centre of the circle is	A. $1^\circ$ B. $1'$ C. $1''$ D. 1 rad
16	The 26th term of the A.P -2,-4,10,.....is	A. 136 B. -136 C. 148 D. -148
17	The common ration of a geometric sequence cannot be	A. 0 B. 1 C. 2 D. 3
18	The sixth term of the sequence 1,3,12,60....is	A. 1500 B. 72 C. 2160 D. 2520

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Question Image

A. Principle of equality of fractions

B. Rule for product of fraction

C. Rule for quotient of fraction

20

Question Image

A. 5

B. 25

D. 3