

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The exact degree value of the function $\sin^{-1}(-\sqrt{3}/2)$ is	A. $70^\circ$ B. $50^\circ$ C. $90^\circ$ D. $60^\circ$
2	The radius of the circle $x^2 + y^2 - 6x + 4y + 13 = 0$ , is	A. 1 B. 2 C. 0 D. None of these
3	Question Image	
4	There are two middle terms in the expansion of $(a+x)^n$ if n is	A. Even +ve integer B. +ve integer C. Odd +ve integer D. All
5	How many necklaces can be made from 6 beads of different colours?	A. 120 B. 60 C. 24 D. 15
6	Z is the set of integers, $(z, *)$ is a group with $a * b = a + b + 1$ , $a, b \in G$ . then inverse of a is	A. -a B. a + 1 C. -2 -a D. None of these
7	Question Image	
8	If (2, 3) and (2, 5) are end points of a diameter of a circle, then the centre of the circle is	A. (2, 4) B. (4, 8) C. (0, 2) D. (0, -2)
9	The range of $y = \sin x$ is _____	A. [1, -1] B. [-1, 1] C. [0, -1] D. [-<span style="font-family: &quot;Times New Roman&quot;; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);"><i></i></span>+<span style="font-family: &quot;Times New Roman&quot;; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);"><i></i></span>]
10	Question Image	
11	Question Image	A. Principle of equality of fractions B. Rule for product of fraction C. Rule for quotient of fraction D. Golden rule of fractions
12	Apollonius was a:	A. Rocket B. Muslims scientist C. Greek mathematicians D. Method of finding conics
13	If sides of $\triangle ABC$ are 16,20,and 33, then the value of the greatest angle to	A. $150^\circ$ B. $132^\circ$ C. $101^\circ$ D. $160^\circ$
14	$w^{-12} =$ _____	A. 0 B. 1 C. w D. $w^{>2</sup>}$
15	$\tan(\alpha - \beta) =$	
16	Question Image	

16

Question Image

17

The A.M. of two numbers is 34 and G.M. is 16, the numbers are

- A. 2 and 64
- B. 64 and 3
- C. 64 and 4
- D. None of these

18

Question Image

- A.  $(1, 7/3)$
- B.  $(1, 7/5)$
- C.  $(1, 11/7)$
- D.  $(1, 3/5)$

19

The locus of the point of intersection of tangents to an ellipse at two points, sum of whose eccentric angles is constant is

- A. A parabola
- B. A circle
- C. An ellipse
- D. A st. line

20

Question Image

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