

## Mathematics General Science Test Medium Mode

| Sr | Questions  | Answers Choice  |
|----|--|---|
| 1  | The points A(3,1),B(-2,-3),C(2,2) are vertices of an (an)  | A. Right triangle<br>B. Equilateral triangle<br>C. Isosceles triangle<br>D. Scalene triangle  |
| 2  | Question Image <input style="width: 100%;" type="text"/>   | B. $a f(x) + c$<br>C. $f(x) + a$  |
| 3  | In R, the additive identity is   | A. 0<br>B. 1<br>C. -1<br>D. None  |
| 4  | If the cone is cut by a plane perpendicular to the axis of the conec, then the section is a:                 | A. Circle<br>B. ellipse<br>C. hyperbola<br>D. parabola  |
| 5  | Tan 3x tan 2x-tan x is equal to  | A. $\tan x \tan 2x \tan 3x$<br>B. $-\tan x \tan 2x \tan 3x$<br>C. $\tan x \tan 2x - \tan x \tan 3x - \tan 2x \tan 3x$<br>D. None of these   |
| 6  | Question Image <input style="width: 100%;" type="text"/>   | D. None of these  |
| 7  | Area bounded between the curve $xy=2$ and the lines $x=1$ and $x=2$  | A. $\ln 2$ square units<br>B. $\ln \sqrt{2}$ square units<br>C. $\ln 4$ square units<br>D. Square units   |
| 8  | Question Image <input style="width: 100%;" type="text"/>   | C. 1<br>D. 0  |
| 9  | Question Image <input style="width: 100%;" type="text"/>   | A. 0<br>B. 1<br>C. -1<br>D. None of these   |
| 10 | In the expansion of $(x+y)^n$ the coefficient of 5th and 12th terms are equal then $n=$                      | A. 12<br>B. $n=14$<br>C. 17<br>D. $n=15$  |
| 11 | Question Image <input style="width: 100%;" type="text"/>   |   |
| 12 | Question Image <input style="width: 100%;" type="text"/>   |   |
| 13 | Question Image <input style="width: 100%;" type="text"/>   |   |
| 14 | The roots of the equation $2^{2x} - 10 \cdot 2^x + 16 = 0$ are   | A. 2, 8<br>B. 1, 3<br>C. 1, 8<br>D. 2, 3  |
| 15 | For any positive integer n   | A. $AB^n = B^n A \Leftrightarrow AB = BA$<br>B. $AB^n = B^n A \Leftrightarrow A, B$ are square matrices and $AB = BA$<br>C. $AB^n = B^n A \Leftrightarrow A + B$<br>D. $AB^n = B^n A \Leftrightarrow A$ and $B$ are square matrices |
| 16 | The additive inverse of 0 is   | A. 1<br>B. -1<br>C. 0<br>D. Does not exist  |
| 17 | If $\pi \leq x \leq 2\pi$ , then $\cos^{-1}(\cos x) =$   | A. $\cos x$<br>B. $-x$<br>C. $1/x$<br>D. $-x$   |
| 18 | If $a_1, r$ are first term and the common ratio respectively then the sum of an infinite geometric series is |   |

19

$u, v, w$  and  $u \times (v \cdot w)$  are

- A. Equal
- B. Parallel
- C. Additive immense of each other
- D. Meaningless

20

Question Image

- A.  $3/8$
- B.  $7/8$
- C.  $1/8$
- D. None