

## Mathematics General Science Test Medium Mode

| Sr | Questions  | Answers Choice  |
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| 1  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. 5<br>C. -5<br>D. none  |
| 2  | Which symbolic notation represent unary operation ?                        | A. -<br>B. V<br>C. ^<br>D. ⇔  |
| 3  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. 1<br>B. 0  |
| 4  | The Principal value of $\sin^{-1}(-1/1/2)$                                 | A. $\pi/2$<br>B. $-\pi/2$<br>C. $\pi$<br>D. $-\pi$                                  |
| 5  | The set $\{Z\setminus\{0\}\}$ is group w.r.t                               | A. Addition<br>B. Multiplication<br>C. Division<br>D. Subtraction                   |
| 6  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. $a \operatorname{cosec}(ax + b) + c$<br>B. $-a \operatorname{cosec}(ax + b) + c$ |
| 7  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. A<br>B. A'<br>C. U<br>D. A A'  |
| 8  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. 1<br>B. 2<br>C. 3<br>D. 4  |
| 9  | if $a_1 = 3$ , $d = 7$ and $a_n = 59$ , then the number of terms in A.P is | A. 7<br>B. 9<br>C. 11<br>D. 13  |
| 10 | Question Image <input style="width: 500px; height: 20px;" type="text"/>    |   |
| 11 | Which of the following sets has closure property w.r.t. addition           | A. $\{0\}$<br>B. $\{1\}$<br>C. $\{0, -1\}$<br>D. $\{1, -1\}$                        |
| 12 | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. 5<br>B. 25<br>D. 3   |
| 13 | A vector of magnitude zero is called                                       | A. Position vector<br>B. Null vector<br>C. Free vector<br>D. None of these          |
| 14 | A polynomial $P(x)$ has a factor $(x-a)$ if $P(a) =$                       | A. a<br>B. x<br>C. 1<br>D. 0  |
| 15 | The square matrix A is skew-symmetric when $A^t =$                         | A. -B<br>B. -C<br>C. -A<br>D. -D  |
| 16 | $0! =$ _____   | A. 0<br>B. 1<br>C. 2<br>D. Not defined  |

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17 A square is inscribed in the circle  $x^2 + y^2 - 2x + 4y + 3 = 0$ . Its sides are parallel to the coordinate axes. Then one vertex of the square is

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18 The value of  $x$  and  $y$  when  $(x + iy)^2 = 5 - 4i$

- A.  $x = 2, y = -1$
- B.  $x = -2, y = 1$
- C.  $x = 2, y = -i$
- D.  $x = 2, y = 2$

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19 Through how many radians does the minute hand of a clock turn in one hour

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20 

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