

## Mathematics General Science Test Hard Mode

| Sr | Questions   | Answers Choice   |
|----|---|--|
| 1  | The values of n such that, in the binomial expansion of $(1 - x)^n$ , co-efficient of $x^2$ , co-efficient of $x^2$ is 3, are | A. -2, -3<br>B. 2, -3<br>C. -2, 3<br>D. None of these                                |
| 2  | Question Image  |  |
| 3  | Question Image  |  |
| 4  | If $-1 < x < 0$ , which of the following statements must be true?   | A. $x < x^2 < x^3$<br>B. $x < x^3 < x^2$<br>C. $x^2 < x^3 < x$<br>D. $x^2 < x < x^3$ |
| 5  | $\sin x + \cos x = 1$ $x =$   |  |
| 6  | Question Image  |  |
| 7  | Which is in the solution set of $4x - 3y < 2$   | A. (3, 0)<br>B. (4, 1)<br>C. (1, 3)<br>D. None                                       |
| 8  | The nth term of of A.P: 1,5,9,15,..... is given by  | A. $4n - 3$<br>B. $4n + 1$<br>C. $3n - 4$<br>D. $4n + 3$                             |
| 9  | Two natural numbers whose sum is 25 and difference is 5, are  | A. 25, 20<br>B. 20, 10<br>C. 20, 5<br>D. 15, 10                                      |
| 10 | Question Image  | D. None of these   |
| 11 | If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a                                      | A. Parabola<br>B. Circle<br>C. Hyperbola<br>D. Ellipse                               |
| 12 | Question Image  |  |
| 13 | A function $F(x)$ is called even if   | A. $F(x) = F(-x)$<br>B. $F(x) = F(-x)$<br>C. $F(x) = -F(x)$<br>D. $2F(x) = 0$        |
| 14 | Question Image  |  |
| 15 | Complex roots of real quadratic equation occur in   | A. Conjugate pair<br>B. ordered pair<br>C. reciprocal pair<br>D. quadratic function  |
| 16 | Question Image  |  |
| 17 | If the 19th term of A.P is 8 and the 4th term is 20, then the first term is   | A. 20.2<br>B. 25.5<br>C. 27.5<br>D. 37.5   |
| 18 | Question Image  | B. -3/4<br>C. 1/16<br>D. 1/4   |
| 19 | What is the period of $\cot x$ ?  |  |
| 20 | Question Image  | A. 1<br>B. 0   |

