

## Mathematics General Science Test Medium Mode

| Sr | Questions  | Answers Choice  |
|----|--|---|
| 1  | Question Image   |   |
| 2  | The exact degree value of the function sin-1( - $\sqrt{3}/2$ ) is  | A. 70 <sup>o</sup> B. 50 <sup>o</sup> C. 90 <sup>o</sup> D. 60 <sup>o</sup>   |
| 3  | If $f(\alpha) = b2$ and $g(c) = d$ where $c=b2$ then $(gof)(a)$ is | A. α<br>B. c<br>C. b<br>D. d  |
| 4  | The law of cosines reduces to a2 +c2 =b2 for                       | A. $\alpha = 90^{\circ}$<br>B. $\beta = 90^{\circ}$<br>C. $\gamma = 90^{\circ}$<br>D. $\alpha + \beta + \gamma = 180^{\circ}$ |
| 5  | Question Image   | A. cos x  B. sec x tan x  C. sec <sup>2</sup> x  Dcosec <sup>2</sup> x  |
| 6  | Question Image   | D. none of these  |
| 7  | Question Image   | A. 6x - 2 + c B. x <sup>3</sup> - x <sup>2</sup> + x + c C. 6x - x <sup>2</sup> + c D. 6x <sup>3</sup> - x <sup>2</sup> + c   |
| 8  | Sin 90° =  | A1<br>B. 0<br>C. 1<br>D. Undefined  |
| 9  | In R the right cancellation property w.r.t. addition is            |   |
| 10 | Question Image   |   |
| 11 | The general term of the A.P. is                                    | A. a <sub>1</sub> + (n - 1) d B. n + (a <sub>1</sub> - 1) d C. d + (n - 1) a <sub>1</sub> D. None of these                    |
| 10 | Question Image   | A. 1  |
| 12 | Question inage   | B. 0  |
| 13 | Question Image   |   |
| 14 | Question Image   | D. none of these  |
| 15 | Three right angles is the angle of measure                         | A. 270°<br>B. 180°<br>C. 90°<br>D. 270'   |
| 16 | For each natural number n, n (n+1) is                              | A. an even B. an odd C. multiple of 3 D. Irrational   |
| 17 | Which is in the solution set of $4x - 3y < 2$                      | A. (3, 0)<br>B. (4, 1)<br>C. (1, 3)<br>D. None  |
| 18 | Roots of the equation $9x^2$ - $12x + 4 = 0$ are                   | A. Real and equal B. Real and distinct C. Complex D. None of these  |
|    |  | A. 0  |

| 19 | Question Image   | B. 20<br>C. 90<br>D. 80        |
|----|------------------|--------------------------------|
| 20 | i <sup>9</sup> = | A. i <sup>2</sup> B1 C. 1 D. i |