## Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | The value of the expression $\sin\theta + \cos\theta$ lies between | |
| 2 | If the pth, qth, and rth terms of an A.P. are in G.P:., then the common ratio of the G.P. is | |
| 3 | A quadrilateral whose diagonals are perpendicular bisector of each other is | A. Square<br>B. Rectangle<br>C. Rhombus<br>D. Parallelogram<br>E. Trapezium |
| 4 | A card is drawn from a pack of cards numbered 1 to 52, the probability that the number on the card is a perfect square is | A. 1/13<br>B. 2/13<br>C. 7/52<br>D. None of these |
| 5 | The set {0,-1} hold closure property under | A. Addition<br>B. Both a &amp; c<br>C. Multiplication<br>D. None of these |
| 6 | Which of the following is factor of x11+a11, where n is an odd integer | A. x-a<br>B. x+a<br>C. 2x-a<br>D. 2x+a |
| 7 | $(a+bi) - (c+di)=$ | A. (a+b) = (c+d)<br>B. (a+c) + i(b+d)<br>C. (a - c) + (c- d)i<br>D. (a - c)+ (b - d)i |
| 8 | Question Image | A. 2<br>B. 4<br>C. 3<br>D. 16 |
| 9 | Question Image | A. $4(x^3-3x^2)^3 + c$<br>B. $3x^2 - 6x + c$ |
| 10 | Question Image | |
| 11 | Question Image | A. 6<br>B. 360<br>C. 120<br>D. 24 |
| 12 | The points A(+1,-1),B(3,0),C(3,7),D(1,8) are vertices of | A. Square<br>B. Parallelogram<br>C. Rectangle<br>D. Trapezium |
| 13 | Question Image | |
| 14 | Question Image | A. 2<br>B. 1<br>C. 5<br>D. 0 |
| 15 | 202.04 is an example of | A. Recurring decimals<br>B. Non-recurring decimals<br>C. Terminating decimals<br>D. None of these |
| 16 | Question Image | |
| 17 | If 4 $^6P_r$= $^6P_{r+1}$, then r is equal to | A. 4<br>B. 3<br>C. 2<br>D. 1 |
| 18 | The coefficient of xn in the expansion of (1-x)-1 is | A. (-1)n2n<br>B. 1<br>C. (-1)n(n+1) |

| | | |
|---|---|---|
| | | D. (n+1) |
| 19 | The solution of differential equation: | A. dy/dx+y/x = $x^2$ is :<br>B. 4xy = $x^4$+ c<br>C. 4x = $x^4$= c<br>D. 4 y = $x^4$+ c<br>E. 4x=$4x^3$ + c |
| 20 | Question Image | |