# Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | Question Image | A. Rule of quotient of fraction<br>B. Golden rule of fraction<br>C. Rule for product of fraction<br>D. Principle for equality of fraction |
| 2 | The sum of even coefficient in the binomial expansion is | A. 2<sup>n+1</sup><br>B. 2<sup>n</sup><br>C. 2<sup>n-1</sup><br>D. 2n |
| 3 | Question Image | A. 1/2<br>B. 2<br>C. 1/4<br>D. 4 |
| 4 | Given two numbers a and b. Let A denote the single A.M. between these and S denote the sum of n A.M.'s between them. Then S/A depends upon | A. n, a, b<br>B. n, a<br>C. n, b<br>D. n |
| 5 | The last term of (1+2x)-2 | A. (-1)-2 (2x)-2<br>B. (-1)-4(-2x)-2<br>C. (-1)-3(2x)-3<br>D. Does not exist |
| 6 | The coefficient of xn in the expansion of (1-2x)-1 is | A. (-1)n2n<br>B. 2n<br>C. (-1)(n+1)xr<br>D. (n+1)2n |
| 7 | Cos 60° = _____ | A. 1<br>B. 2<br>C. 1/2<br>D. 3 |
| 8 | If a > 0, b > 0, c > 0, then the roots of the equation $ax^2 + bx + c = 0$ are | A. Real and negative<br>B. Non-real with negative real parts<br>C. Real and positive<br>D. Nothing can be said |
| 9 | cot(3π/2 -θ)=_____; | A. tanθ<br>B. cotθ<br>C. -tanθ<br>D. -cotθ |
| 10 | Which is in the solution set of 4x - 3y < 2 | A. (3, 0)<br>B. (4, 1)<br>C. (1, 3)<br>D. None |
| 11 | If 4 $^6P_r = {}^6P_{r+1}$, then r is equal to | A. 4<br>B. 3<br>C. 2<br>D. 1 |
| 12 | Question Image | |
| 13 | Question Image | |
| 14 | The law of sines can be used to solve | A. Right angle triangle<br>B. Isosceles triangle<br>C. oblique triangle<br>D. haxagon |
| 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 | If the lines 2x-3y-1=0,3x-y-5=0 and 3x+py+8=0 meet at a unique point then | A. p = -14<br>B. p = -1<br>C. p =0<br>D. p=12 |

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| 17 | Period of cot x is _____ | |
| 18 | $w^{15}$= _____ | A. 0<br>B. 1<br>C. w<br>D. w<sup>2</sup> |
| 19 | The perpendicular bisector of any chord of a circle | A. Passes through the centre of the circle<br>B. Does not pass through the centre of the circle<br>C. May or may not pass through the centre of the circle<br>D. None of these |
| 20 | Derivative of strictly increasing function is always | A. Zero<br>B. Positive<br>C. Negative<br>D. Both (A) and (B) |