# Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | Question Image | |
| 2 | If B⊆ A, then complement of B in A is = ---------- | A. A-B<br>B. A∩B<br>C. B-A<br>D. A∪B |
| 3 | if one root of the equation ix2 - 2(i + 1) x +(2 - i)= 0 is 2 - i then the other root is | A. -i<br>B. 2 + i<br>C. i<br>D. 2 - i |
| 4 | If distance of (a,b) from origin is 5 then | A. a<sup>2</sup>+ b<sup>2</sup>=5<br>B. a = 5<br>C. b = 5 |
| 5 | The line y =mx +1 is tangent to the parabola y2 =4x if | A. m=1<br>B. m=2<br>C. m=3<br>D. m=4 |
| 6 | If $x^3$+ 4$x^3$- 2x +5 is divided by x - 1, then the reminder is | A. 8<br>B. 6<br>C. 4<br>D. None of these |
| 7 | Question Image | A. c/a<br>B. -c/a<br>C. b/a<br>D. -b/a |
| 8 | Question Image | |
| 9 | Sum of n terms of a geometric series if \| r \| < 1 is | |
| 10 | The value of k (k > 0) for which the equation $x^2$+ kx + 64 = 0 and $x^2$- 8x + k = 0 both will have real roots is | A. 8<br>B. -16<br>C. -64<br>D. 16 |
| 11 | f(x) = $x^3$is: | A. an odd function<br>B. an even function<br>C. an implicit function<br>D. a quadratic funtion |
| 12 | Question Image | |
| 13 | Question Image | |
| 14 | For two events A and B if P(A) = P (A/B) = 1/4 and P(B/A) = 1/2, then | A. A is sub-event of B<br>B. A and B are mutually exclusive<br>C. A and B are independent and P(A/B) = 3/4<br>D. None of these |
| 15 | When a selection of object is made without paying regard to the order of selection, it is called | A. Sequence<br>B. Series<br>C. Combination<br>D. Permutation |
| 16 | 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 |
| 17 | Question Image | D. none of these |
| 18 | Question Image | A. 1<br>B. 0 |

| | | |
|---|---|---|
| 18 | Question Image | C. -1<br>D. 2 |
| 19 | Both the roots of the equation (x -b) (x - c ) + (x -c) (x-a) +(x-a) (x-b) = 0 are always | A. Positive<br>B. Negative<br>C. Real<br>D. None of these |
| 20 | If A is a skew-symmetric matrix of order n and P, any square matrix of order n.prove that P' AP is | A. Skew-symmetric<br>B. Symmetric<br>C. Null<br>D. Diagonal |