## Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|----|-----------|----------------|
| 1 | In R the number of identity element w.r.t '+' is | A. One<br>B. Two<br>C. Three<br>D. Four |
| 2 | Question Image | |
| 3 | Question Image | |
| 4 | Given X,Y are any two sets such that number of elements in X = 18, number of elements in set Y = 24, and number of elements in set X∪ Y =40, then number of elements in set x∩ Y = | A. 3<br>B. 1<br>C. 2<br>D. 4 |
| 5 | The number of terms in the expansion of $(a + x)^{12}$ is | A. 13<br>B. 12<br>C. 11<br>D. 10 |
| 6 | The line Ax + By + C = 0 will touch the circle $x^2 + y^2 = \lambda$ *when* | A. $C^2 = \lambda (A^2 + B^2)$<br>B. $A^2 = \lambda (A^2 + C^2)$<br>C. $B^2 = \lambda (A^2 + C^2)$<br>D. None of these |
| 7 | Form a group of 5 men and 3 women, a committee of 4 persons is to be selected randomly. The probability that there is a majority of men is | A. 1/4<br>B. 1/3<br>C. 1/2<br>D. 1/6 |
| 8 | Power set of X i.e P(X)..........under the binary operation of union U | A. Forms a group<br>B. Does not form a group<br>C. Has no identity element<br>D. Infinite set although X is infinite |
| 9 | Question Image | |
| 10 | Out of 10, 000 families with 4 children each, the number of families all of whose children are daughters is | A. 375<br>B. 500<br>C. 625<br>D. 150 |
| 11 | 120°=_____ | |
| 12 | Question Image | A. $100x^{99}$<br>B. $100x^{101}$<br>C. $-99x^{99}$<br>D. $-100x^{101}$ |
| 13 | Question Image | A. A<br>B. A'<br>C. U<br>D. A A' |
| 14 | If a, b, c are the measures of the sides of a triangle then | |
| 15 | Question Image | |

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|---|---|---|
| 16 | How many comittees of 5 numbers can be chosen from a group of 8 players person when each committee must include 2 particular persons | A. 8!<br>B. 5!3!<br>C. 5!<br>D. 20 |
| 17 | The law of consines is | |
| 18 | A circle passing through the vertices of any triangle is called | A. Circumcirle<br>B. Incircle<br>C. Escribed circle<br>D. Unit circle |
| 19 | If A∩B=B, then n(A∩B) is equal to | A. n(a)<br>B. n(a)+n(c)<br>C. n(c)<br>D. None of these |
| 20 | For trival solution |A| is | A. A<br>B. |A| = 0<br>C. A = 0<br>D. |A|≠ 0 |