

## Mathematics General Science Test Medium Mode

| Sr | Questions  | Answers Choice   |
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| 1  | The polynomial $x - a$ is a factor of the polynomial $f(x)$ if and only if | A. $f(a)$ is positive<br>B. $f(a)$ is negative<br>C. $f(a) = 0$<br>D. None of these                        |
| 2  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. Less than 1<br>B. Equal to 1<br>C. Greater than 1 but less than 2<br>D. Greater than or equal to 2      |
| 3  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | D. none of these   |
| 4  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | D. none of these   |
| 5  | Write the first four terms of the arithmetic sequence 5, 2, -1, ... is     | A. 3<br>B. -4<br>C. 7<br>D. 1  |
| 6  | If $x^3 + 4x^3 - 2x + 5$ is divided by $x - 1$ , then the remainder is     | A. 8<br>B. 6<br>C. 4<br>D. None of these   |
| 7  | Roots of the equation $x^2 + 5x - 1 = 0$ are                               | A. Rational<br>B. Irrational<br>C. Complex<br>D. None of these   |
| 8  | $f(x) = 3x^4 - 2x^2 + 7$ is:   | A. an even function<br>B. an odd function<br>C. an even and implicit function<br>D. neither even nor a odd |
| 9  | Question Image <input style="width: 500px; height: 20px;" type="text"/>    |  |
| 10 | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. $2x + 2y$<br>B. $4 - x^{>2}</sup></sup>$<br>C. $-x/y$<br>D. $x/y$                                       |
| 11 | A sequence whose reciprocal is an A.P is called                            | A. Oscillator<br>B. H.P<br>C. G.P<br>D. None of these  |
| 12 | For two vector a and b, $a+b =$ _____                                      | A. a b<br>B. b+a<br>C. b-a<br>D. None  |
| 13 | Question Image <input style="width: 500px; height: 20px;" type="text"/>    |  |
| 14 | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. 0<br>B. 1<br>C. -1<br>D. 2  |
| 15 | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. 1.5<br>B. 1.2<br>C. 8<br>D. None of these   |
| 16 | Question Image <input style="width: 500px; height: 20px;" type="text"/>    | A. An empty set<br>B. Universal set<br>C. A singleton set<br>D. None of these                              |
| 17 | Which of the following integrals can be evaluated                          |  |
| 18 | When rational fraction is separated into partial fractions, the result is  | A. an identity<br>B. A fraction<br>C. A partial sum<br>D. Improper fraction                                |

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| 19 | A circle which touches one side of a triangle externally and the other two sides produced is called _____ | <p>A. In-circle<br/> B. Circum circle<br/> C. Escribed circle<br/> D. None of these</p>   |
| 20 | The equation of the sphere thro' the origin and making intercepts a, b, c on co-ordinate axes is          | <p>A. <math>x^2 + y^2 + z^2 + ax + by + cz = 0</math><br/> B. <math>x^2 + y^2 + z^2 - 2ax - 2by - 2cz = 0</math><br/> C. <math>x^2 + y^2 + z^2 = a + b + c</math><br/> D. <math>x^2 + y^2 + z^2 - ax - by - cz = 0</math></p> |