## Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | Question Image | |
| 2 | Three consecutive terms of a progression are 30, 24, 20. The next terms of the progression is | |
| 3 | The foot of perpendicular from $(\alpha, \beta, \gamma)$ only y-axis is | A. ($\alpha$, 0, 0)<br>**B. (0, $\beta$, 0)**<br>C. (0, 0, $\gamma$)<br>D. (0, 0, 0) |
| 4 | The expansion $(1 + x)^{-3}$ holds when | A. $\|x\| > 1$<br>**B. $\|x\| < 1$**<br>C. $x < 1$<br>D. $x > 1$ |
| 5 | Question Image | A. A finite non-empty set<br>**B. Null set**<br>C. Both a and b<br>D. None of these |
| 6 | The mid point of the line segment joining the points (3,-1) and (-3,1) is | A. (3,-1)<br>**B. (0,0)**<br>C. (2,2)<br>D. (4,4) |
| 7 | If $\triangle ABC$ is right, law of cosine reduce to | A. Law of sine<br>B. Law of tangent<br>**C. Phthogorous theorem**<br>D. Hero's formula |
| 8 | Question Image | |
| 9 | $x^2 + x - 6 = 0$ is a conditional equation and it is true for | A. 2, 3<br>**B. 2, -3**<br>C. -2, -3<br>D. -2, 3 |
| 10 | The locus of the point of intersection of tangents to an ellipse at two points, sum of whose eccentric angles is constant is | A. A parabola<br>B. A circle<br>C. An ellipse<br>**D. A st. line** |
| 11 | If $(x_1, y_1)$ and $(x_2, y_2)$ are the end points of a diameter then the centre of the circle is | |
| 12 | $\cos 3a = _____$ ; | A. $3\sin a - 4\sin 3a$<br>B. $4\sin a - 3\sin 3a$<br>C. $3\cos 3a - 4\cos a$<br>**D. $4\cos 3a - 3\cos a$** |
| 13 | In R the number of identity element w.r.t '+' is | **A. One**<br>B. Two<br>C. Three<br>D. Four |
| 14 | The graph of a quadratic function is | A. Circle<br>B. Straight line<br>**C. Parabola**<br>D. Triangle |

| 15 | Question Image | D. none of these |
|---|---|---|
| 16 | if $a_9$ =19,a9=31 are the 6th and 9th term of an A.P. and d=4 is the common difference, then 18th term of the sequence is | A. 65<br>B. 67<br>C. 71<br>D. 75 |
| 17 | Question Image | |
| 18 | Question Image | |
| 19 | Question Image | |
| 20 | Another name of quadratic equation is | A. Polynomial<br>B. 2nd degree polynomial<br>C. Linear equation<br>D. simaltaneous equations |