# Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | The coordinates of the point that divides the join of A(-6,3) and B(5, -2) in the ratio 2:3 internally | |
| 2 | 3x + 4 ≥ 0 is | A. equation<br>B. inequality<br>C. identity<br>D. none of these |
| 3 | Question Image | D. none of these |
| 4 | Question Image | D. none of these |
| 5 | 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 |
| 6 | The second degree equation of the form Ax2 +By2 +Gx +Fy +C =0 represent hyperbola if | A. A = B≠ 0<br>B. A≠ B and both are of same sign<br>C. A≠ B both are of opposite sign<br>D. Either A = 0 or B =0 |
| 7 | The upper 3/4 the portion of a vertical pole subtends an angle $\tan^{-1}3/5$ at a point in the horizontal plane through its foot and at a distance 40 m from the foot. A possible height of the vertical pole is | A. 20 m<br>B. 40 m<br>C. 60 m<br>D. 80 m |
| 8 | Question Image | A. 5<br>B. 25<br>D. 3 |
| 9 | Domain of y = scs x is | A. All real numbers except π/2 + n*π<br>B. R<br>C. All negative integers<br>D. None of these |
| 10 | 3j . k x i | A. 0<br>B. 1<br>C. 3<br>D. 9 |
| 11 | Question Image | |
| 12 | A fixed point which lies on the axis of the cone is called its: | A. axis<br>B. apex<br>C. plane<br>D. diameter |
| 13 | sin(a-90°)=_____; | A. sina<br>B. cosa<br>C. -sinθ<br>D. -cosa |
| 14 | $w^{15}$= _____ | A. 0<br>B. 1<br>C. w<br>D. w<sup>2</sup> |
| 15 | Question Image | A. 0<br>B. 3<br>C. 9<br>D. -3 |
| 16 | Question Image | A. 1 + tan<sup>2</sup>x + c<br>B. tan x + c<br>C. -tan x + c<br>D. cot x + c |
| 17 | Question Image | A. 405 / 256<br>B. 504 / 259<br>C. 450 / 263<br>D. None |
| | | A. incentre |

| | | |
|---|---|---|
| 18 | The point of concurrency of the medians of a triangle is called | B. circumcentre<br>C. e-centre<br>D. centroid |
| 19 | x is a member of the set [-1, 0, 3, 5] y is a member of the set {-2, 1, 2, 4} which is possible? | A. x - y = -6<br>B. x - y < -6<br>C. x - y > -6<br>D. None |
| 20 | Question Image | A. a cos(ax + b) + c<br>B. - a cos(ax + b) + c |