

Date: 18-01-2022

Batch: 9th Genesis

Sub: Mathematics

Test code: SEP15 (21021318)

Time: 2 Hours M. Marks: 24

1. In the diagram ABCD is a rectangle with AE = EF = FB, the ratio of the areas of triangle CEF and that of rectangle ABCD is: (3 marks)

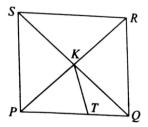


2. In the adjoining figure. $\Box ABCD$ and $\Box PBCQ$ are parallelogram BC = 12 cm PR = 8 cm. Find A (ΔPSB):

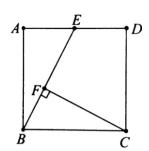
(3 marks)



- 3. The length of the side of a rhombus is 4 cm. If one of the diagonals is equal to the side of rhombus, then the length of other diagonal in cm will be:-
- 4. In PQRS is a square whose vertices P, Q, R and S are one the mid point of side AB, BC, CD and DA of a square ABCD respectively. Then the ratio of the areas of square PQRS to square ABCD is: (3 marks)
- 5. In figure, PQRS is a square. The diagonals RP and SQ intersect each other at K. T is a point on PQ such that PK = PT, then $\angle TKQ =$ (3 marks)



6. In the figure, ABCD is a 2 × 2 square. E is the midpoint of AD, and F is on BE. If CF is the perpendicular to BE, then the area of quadrilateral CDEF is: (3 marks)



- 7. ABCD is a parallelogram G is a point on AB such that AG = 2GB, E is a point on DC such CE = 2DE and F is a point on BC such that BF = 2 FC then ar (ΔEFG): ar ($\|gm \ ABCD$) = (3 marks)
- 8. ABCD is a parallelogram, X and Y are the mid points of BC and CD respectively. Then ar $(\frac{ar.\triangle AXY}{ar.\triangle ABCD})$

(3 marks)

