HANDOUT
MODULE 1/3
CLASS VII - MATHEMATICS
CONGRUENCE OF TRIANGLES

1. CONGRUENT FIGURES: Two figures are said to be congruent if they have the same shape and same size.
2. Congruent figures cover each other completely when superposed.
3. Symbol of congruence is $\cong$.
4. If figure F1 is congruent to figure F2 we write F1 $\cong$ F2
5. Two line segments are congruent, if they have the same length.
6. Two angles are said to be congruent if they have the same measure.
7. Two circles are congruent if they have the same radius.
8. Two squares are congruent if they have the same side length.
9. Two rectangles are congruent if they have the same length and breadth
10. Congruent figures have equal area, but figures with same area need not be congruent.
11. When two triangles ABC and PQR are given , there are in all, six possible matchings or correspondence between them,i.e.

    (i) ABC $\leftrightarrow$ PQR   (ii) ABC $\leftrightarrow$ QRP   (iii) ABC $\leftrightarrow$ PRQ

    (iv) ABC $\leftrightarrow$ QPR   (v) ABC $\leftrightarrow$ RPQ   (vi) ABC $\leftrightarrow$ RQP.

    All these correspondences may lead to congruencies.

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