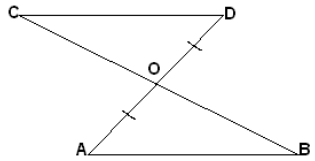
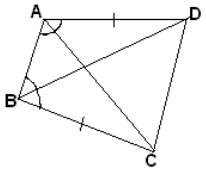
Anita's Coaching Classes

MARKS :25
TIME: 1:30hrs

1) Line-segment AB is parallel to another line-segment CD. O is the mid-point of AD (see Fig. 7.15). Show that (i) $\Delta AOB \cong \Delta DOC$ (ii) O is also the mid-point of BC [3]

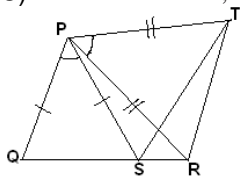


2) ABCD is a quadrilateral in which AD = BC and DAB = CBA (see Fig. 7.17). Prove that [3]
(i) $\Delta ABD \cong \Delta BAC$

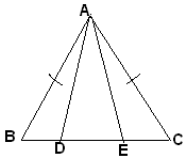


(ii) BD = AC
(iii) $\angle ABD = \angle BAC$.

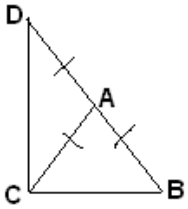
3) PR = PT, PQ = PS and $\angle QPS = \angle TPR$. Show that QR = ST [4]



4) In an isosceles triangle ABC with AB = AC, D and E are points on BC such that BE = CD .Show that AD = AE. [3]



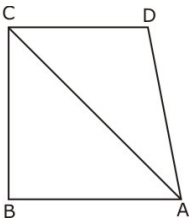
5) ΔABC is an isosceles triangle in which AB = AC. Side BA is produced to D such that AD = AB [3]



Show that BCD is a right angle.

6) In two right triangles one side and an acute angle of one are equal to the corresponding side and angle of the other. Prove that the triangles are congruent. [4]

7) In the given figure prove that CD +DA +AB +BC >2AC [3]



8) Fill in the blanks: [5]
(i) In a right triangle the hypotenuse is the… side.
(ii) The sum of three altitudes of a triangle is... than its perimeter.
(iii) The sum of any two sides is …… than the third side.

(iv) If two sides of a triangle are unequal, then the larger side has ….. angle opposite to it.

(v) If two angles of a triangle are unequal, then the smaller angle has the ….. side opposite to it.

(vi) Sides opposite to equal angles of a triangle are ……

(vii) In an equilateral triangle all angles are …… and of …… degree.

(viii)In right triangles ABC and DEF, if hypotenuse AB = EF and AC = DE, then $\Delta ABC \cong \Delta$…

(ix)If altitudes CE and BF of a triangle ABC are equal, then AB =…

(x)In triangle ABC if A = C then AB =…