

1. PQ and RS are two chords of a circle with centre O. M and N are the midpoint of PQ and RS respectively.
  - (a) Find the area of the circle which diameter is equal to 10cm
  - (b) Prove that  $ON \perp RS$ .
  - (c) IF  $PQ > RS$  then prove that,  $OM < ON$
  
2. Short question
  - (a) What is the angle subtended at the centre of a circle?
  - (b) Each chord divides a circle into how many arcs?
  - (c) Maximum in how many points a straight line can intersect a circle?
  - (d) If D is the midpoint of a chord AB of a circle with centre O, then  $\angle ODB = ?$
  - (e) A circle with area 1256 sq meters. What will be the diameter of the circle in centimeter?