**Class 10A First term project Math**

**Last Date of submission Wednesday 12 August 2020**

**1. Prove that Area of circle is equal to π r2**

**Pre require knowledge i) Area of triangle ii) circumference of circle**

**Procedure:**

**Procedure: Construct 3 circles of radius multiple of 7. E.g. 7, 8.4, 9.1, 7.7, 6.3 ….**

**Construct a circle on a chart paper and divide it in to triangle by joining lines from the center of the circle.**

**Find the area of triangle by using formula**

**Adding area of all triangles provide the area of circle.**

**½ r (l1 + l2 + ….) = ½ r x c = ½ r x 2 π r**

**Detail working discussed in class.**

**2.Procedure: Construct 3 circles of radius multiple of 7. E.g. 7, 8.4, 9.1, 7.7, 6.3 ….**

**Take arc about 1cm and cut through circumference.**

 **Join the end of arc to the centre of the circle and cut it out.**

**Arrange the pieces to form a rectangle whose breadth is equal to the radius of the circle.**

**Measure the length of rectangle. Find the area of rectangle = l X b**

**Verify with the formula of area of circle.**

**2. Data Handling**

**Collect the mathematics marks of your class, prepare frequency distribution table taking class interval of 0 - 10,10 – 20 so on.**

**Draw the histogram with the following information, find the mode from histogram.**

**Also plot in an ogive graph, median marks and calculate the number of students getting more than 60% of marks and those getting less than 40% of marks.**

**Calculate Mean marks of the class by any one method.**