

Name: _____						Subject: Mathematics		Class: 10 th		Time: 80 minutes		Total Marks: 30	
Chapter No.13+ Theorem 4				MJDexpert.com				Obtained marks					

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts of Question 3. Cutting and removal of any content is strictly prohibited.

Q.No.1: Choose the correct Answer. $8 \times 1 = 8$

1. The circumference of a circle is called:			
a) Chord	b) Segment	c) Boundary	d) None
2. Angle inscribed in a semi-circle is:			
a) $\frac{\pi}{2}$	b) $\frac{\pi}{3}$	c) $\frac{\pi}{4}$	d) $\frac{\pi}{6}$
3. The tangent and radius of circle at the point of contact are:			
a) Parallel	b) Perpendicular	c) Non- Perpendicular	d) Collinear
4. If two circle touch each other the their centers and point of contact are:			
a) Parallel	b) Coincident	c) Collinear	d) Non-Collinear
5. The measure of external angle of regular hexagon is:			
a) $\frac{\pi}{3}$	b) $\frac{\pi}{4}$	c) $\frac{\pi}{6}$	d) $\frac{\pi}{9}$
6. How many tangents can be drawn from a point outside the circle:			
a) 1	b) 2	c) 3	d) 4
7. If the two circles touches externally, then the distance between their centers is equal to:			
a) Difference of their radii	b) Sum of their radii	c) Product of their radii	d) None
8. The length of transverse tangents to the pair of circle are:			
a) Unequal	b) Equal	c) Overlapping	d) None

Q.No.2: Give the Short answer. $(5 \times 2 = 10)$

i. Define circumscribed circle.
ii. Define escribed circle.
iii. Define regular hexagon.
iv. The length of each side of regular octagon is 3cm. Measure its perimeter.
v. Divide an arc of any length into two equal parts.

Q.No.2: Give the answer. $(8 + 4 = 12)$

a) Prove that if two chords of a circle are congruent then they will be equidistant from the center.
b) Drawn two common tangents to two touching circles of radius 4cm and 5cm.