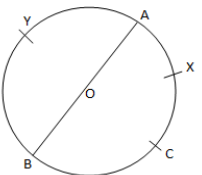
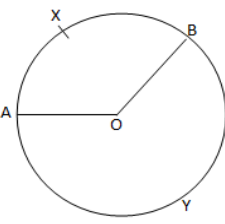
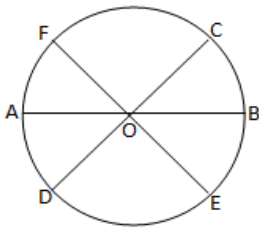
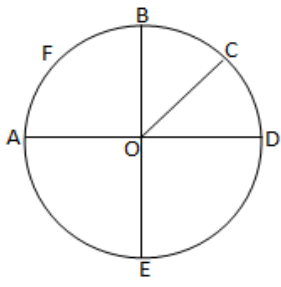
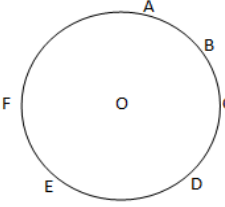
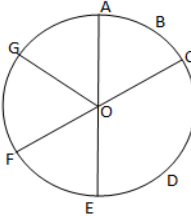
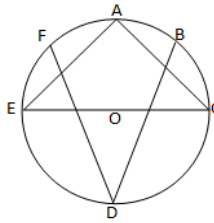
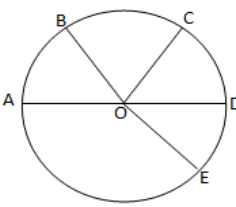
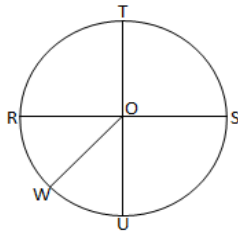
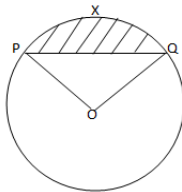
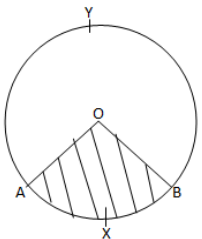
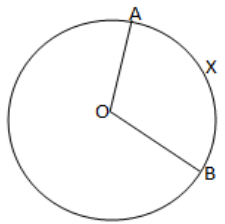
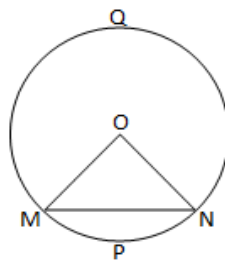
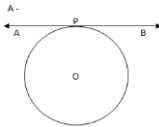
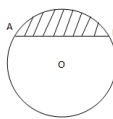
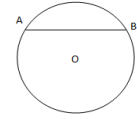
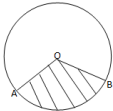
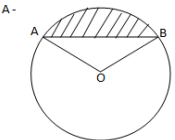
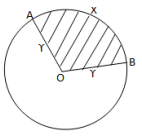
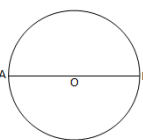
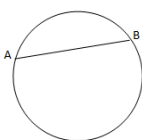
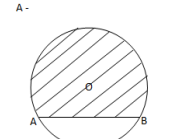
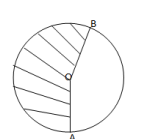
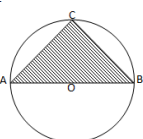
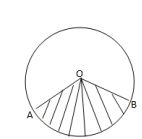
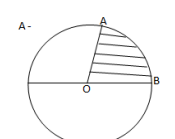
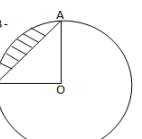
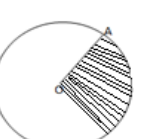
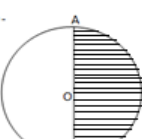


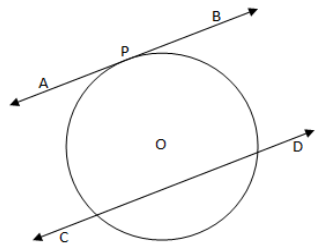
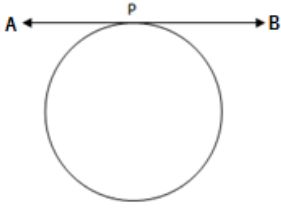
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
1	40	K	In the figure to the right, O is the center of the circle and AB the diameter. Then which one of the following is a minor arc?		arc ABC	arc ACB	arc AXC	arc AYB	C
2	40	K	In circle O shown to the right, A, X, B and Y are points on the circle. What do you call the part AYB of the circle?		Minor arc	Major arc	Semicircle	Sector	B
3	40	K	Which of the following is true about circle O given below?		AFC is major arc	DFB is minor arc	FAD is minor arc	DEB is major arc	C
4	40	K	Given circle O with diameters AD and BE, then which one is a minor arc?		ABD	ABC	BED	AED	B

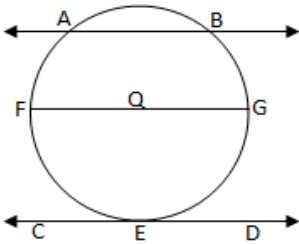
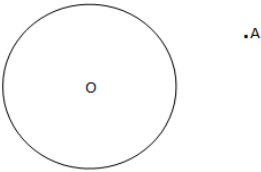
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
5	40	K	In the circle below, which are minor arcs?		ABC and BEF	BCD and ABF	ABD and ADF	CDE and FAB	D
6	40	K	In the circle given below, which arcs are minor and major, respectively?		GFE and CDE	ADE and DEF	BCD and BDF	CEF and EFG	C
7	40	K	In the following circle, if O is the center, which one shows a minor arc of the circle?		$\widehat{EAC}$	$\widehat{EDC}$	$\widehat{FDC}$	$\widehat{DCB}$	D
8	40	K	In circle O with diameter AD as shown below, which one is a major arc?		ABD	ACE	ABC	BCD	B

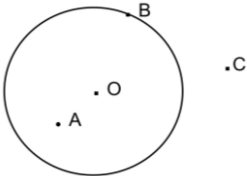
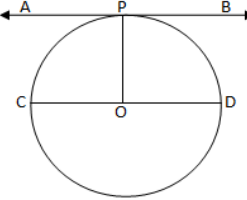
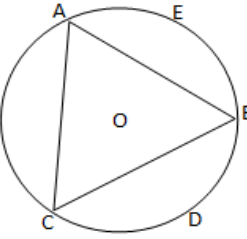
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
9	40	K	In the figure below, RS and TU are two diameters of circle O. Which one of the following is a major arc?		$\overline{TRW}$	$\overline{TRU}$	$\overline{RWU}$	$\overline{WST}$	D
10	40	K	An arc whose length is less than a semi-circle is _____.		semi circle	major arc	minor arc	sector of a circle	C
11	40	K	In a circle, if the measure of an arc is 120° , then the arc is _____.		minor arc	major arc	semicircle	segment	A
12	40	K	Which of the following can be the degree measure of a minor arc?		145°	180°	245°	270°	A
13	41	K	The region bounded by two radii of a circle and the intercepted arc of the circle is _____ of the circle.		a chord	a tangent	a sector	a segment	C
14	41	K	In the figure to the right, O is the center of the circle. Then the shaded region represents _____.		arc	segment	sector	chord	B

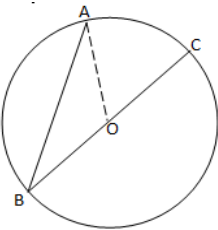
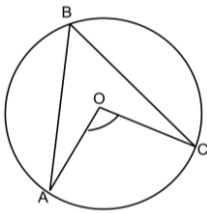
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
15	41	K	The figure at the right is a circle with center at O. What does the shaded region represent?		Minor arc	Major arc	Sector	Segment	C
16	41	K	Part of a circle bounded by AO, OB and arc AXB is _____. (Hint: O is the center)		secant	sector	chord	minor arc	B
17	41	K	In the figure given below, what is the segment of circle O?		MON	PON	MPN	QOM	C
18	41	K	Which of the following figures of a circle shows a sector?						D

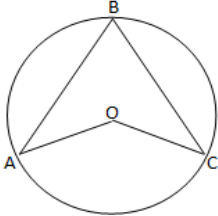
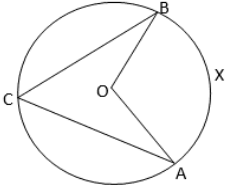
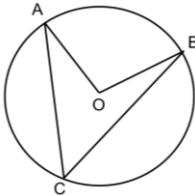
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
19	41	K	Which one of the following figures indicates a sector of a circle?						B
20	41	K	Which of the shaded parts of the following circles represents a segment?						A
21	41	K	O is the center of the circle. Which one of the following regions shows the segment of a circle?						B
22	41	K	The region bounded by two radii of a circle and the arc they intercept is _____.		a segment of a circle	a sector of a circle	a quarter of a circle	a semicircle	B
23	41	K	What is the part of a circle bounded by a chord and an arc of the circle?		Diameter	Chord	Segment	Sector	C
24	41	K	Which one of the following statements is true?		A sector contains a chord as one of its sides	A sector of a circle is a region bound by an arc and two radii	A sector of a circle is a triangular region	A segment of a circle is a region bounded by an arc and two radii	B

S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
25	42	K	In the figure to the right, line CD is _____.		chord	secant	segment	tangent	B
26	42	K	A line that intersects a circle at two points is _____.		segment	sector	tangent	secant	D
27	42	K	A line which cuts a circle at two points is _____.		tangent	radius	secant	sector	C
28	42	K	A straight line on a plane of a circle meets the circle at most ____ points.		2	3	4	5	A
29	42	K	In the circle below, line AB passes through it by touching at point p. What is line AB with reference to the circle?		Diameter	Radius	Secant	Tangent	D
30	42	K	A line which touches a circle exactly at one point is _____.		a secant line	a tangent line	diameter	radius	B
31	42	K	Which line touches a circle exactly at one point?		Chord	Secant	Segment	Tangent	D

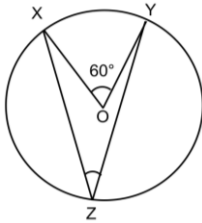
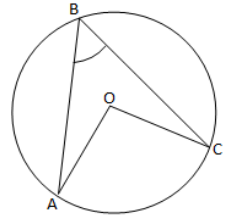
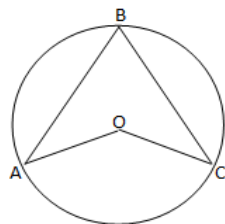
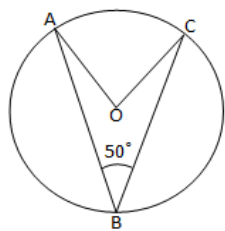
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
32	42	K	What is the name of a line that touches a circle at one point?		Arc	Radius	Secant	Tangent	D
33	42	K	Which one of the following is true about tangent of a circle?		It can pass through the center of the circle	Its end point can lie on the circle	It can be the diameter of a circle	It intersects the circle exactly at one point	D
34	42	K	Which of the following is true about tangent of a circle?		A line intersects a circle at two points	A line intersects a circle at exactly one point	A line passes through at the center of a circle	A line does not intersect a circle at any point	B
35	42	K	Which of the following describes the difference between secant and tangent lines of a circle?		Secant line touches a circle at one point whereas tangent line touches a circle at two points	Secant line forms radius of a circle whereas tangent line forms diameter of a circle	Secant line crosses a circle at two points whereas tangent line touches a circle at a point	With reference to a circle, tangent line is shorter than secant line	C
36	42	K	Which one is correct about Circle Q?		AB is tangent to circle Q	FG is tangent to circle Q	CD is secant to circle Q	E is a point of tangency	D
37	42	K	The figure below is a circle with center at O and A is an exterior point. What kind of line can you draw through points A and O?		Tangent	Secant	Chord	Arc	B

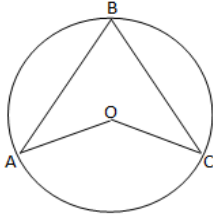
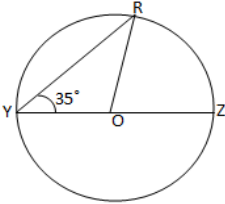
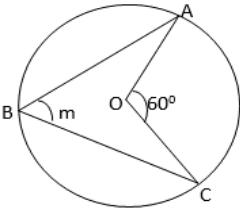
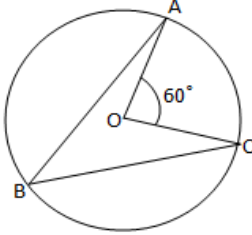
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
38	42	K	Line AB passes through the center of a circle. What is this line called?		Arc	Radius	Secant	Tangent	C
39	42	K	Which one of the following lines or line segments is NOT possible to draw through the center of the circle?		A secant	A chord	A tangent	A diameter	C
40	42	K	In the figure below, point O is the center of the circle. Which one is the correct statement?		You can draw a tangent line through point A	Point O is a point of tangency	Point C is a point of tangency	You can draw a secant line through points O and B	D
41	42	K	Given the figure below, which one of the following is correct?		AB is a secant line of the circle	CD is a line of tangency	Point P is a point of tangency	OP is the secant line of the circle	C
42	42	A	Let A, B, and C be the three points not on the same straight line. Then which one of the following is true?		We can draw many circles which pass through all the three points A, B, and C	The perpendicular bisector of AB and BC can meet at point C	We can draw a secant line through point A only	We can draw a tangent line either at point A or point B or point C	D
43	42	A	The maximum degree of an arc of a circle formed by secant line is _____.		45°	90°	180°	360°	C

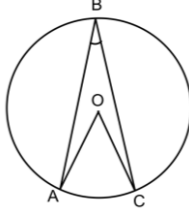
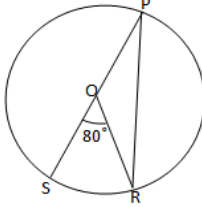
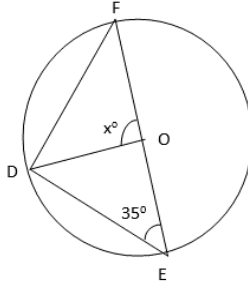
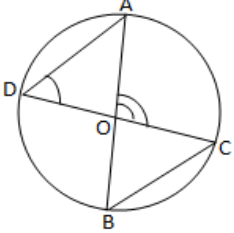
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
44	43	K	Which of the following is the first step to construct the center of a circle?		Drawing chords of the circle	Drawing the circle	Drawing perpendicular bisectors of a chord	Drawing a tangent line to the circle	B
45	43	K	Which step is important to determine the center of a circle by construction?		Drawing a tangent line	Drawing a chord of the circle	Drawing a point inside the circle	Drawing a point outside the circle	B
46	44	K	An inscribed angle is an angle whose _____.		vertex lies on the center of the circle	vertex lies on any point on the circle and subtended by an arc of the circle	sides are tangents to the circle	sides are tangents to the circle and its vertex lies outside the circle	B
47	44	K	The vertex of an angle lies on the circle and its sides contain chords of the circle. This angle is called _____.		angle formed by two inscribed chords	central angle	cyclic quadrilateral angle	inscribed angle	D
48	44	K	In the figure to the right, if O is the center and A, B, and C are points on the circle, which of the following is true?		$\angle AOB$ is a central angle	$\angle AOB$ is an inscribed angle	$\angle AOC$ is an inscribed angle	$\angle ABC$ is a central angle	A
49	44	K	In circle O at the right, $\angle AOC$ is _____.		right angle	obtuse angle	inscribed angle	central angle	D

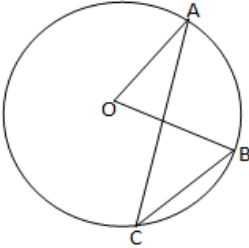
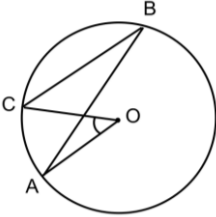
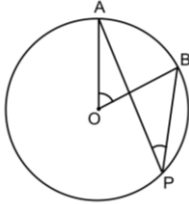
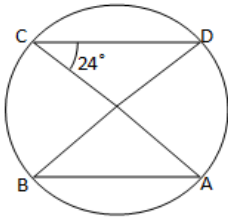
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
50	44	K	An angle inscribed in an arc whose degree measure is less than 180° is _____.		acute	obtuse	right	semicircle	A
51	44	K	An angle inscribed in an arc greater than a semicircle is _____.		obtuse angle	acute angle	right angle	reflex angle	A
52	44	K	In the figure below, O is the center of the circle. Then which one of the following is a central angle of the circle?		$\angle ABC$	$\angle BAO$	$\angle AOC$	$\angle BCO$	C
53	44	K	Given a circle with center at O as shown below, if $\angle AOB$ is a central angle, which of the following is NOT true?		$m(\angle ACB) = \frac{1}{2}m(\angle AOB)$	$m(\angle AOB) = m(\angle AXB)$	$m(\angle ACB) = \frac{1}{2}m(\angle AXB)$	$m(\angle AOB) = \frac{1}{2}m(\angle AXB)$	D
54	44	K	In the figure below, $\angle AOB$ is a central angle of the circle. Which one is an inscribed angle of the circle?		AB	$\angle AOB$	$\angle ACB$	$\widehat{ACB}$	C

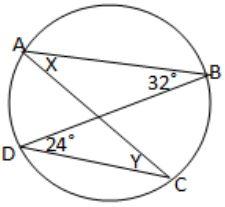
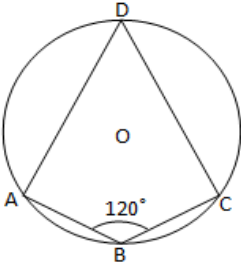
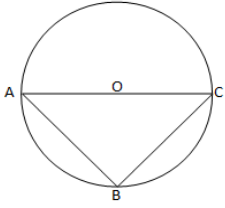
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
55	44	K	If O is the center of the following circle, which angle represents the inscribed angle?		$\angle BCD$	$\angle AOD$	$\angle BCF$	$\angle DCE$	A
56	45	K	If O is the center of the circle shown, which one of the following is true?		$m(\angle POR) = \frac{1}{2} m(\angle PQR)$	$m(\angle POR) = m(\angle PQR)$	$m(\angle POR) = m(\text{arc } PSR)$	$m(\text{arc } PSR) = \frac{1}{2} m(\angle RQP)$	C
57	45	K	In the figure to the right, O is the center of the circle. What is the measure of $\angle AOC$?		30°	60°	90°	120°	D
58	45	K	In the figure given below, O is the center of the circle. If $m(\angle ABC) = 70^\circ$, then what is $m(\angle AOC)$?		35°	70°	110°	140°	D

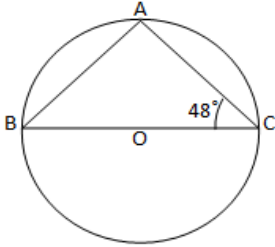
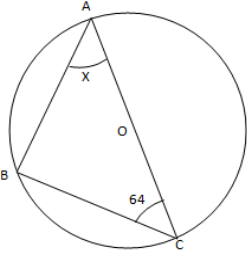
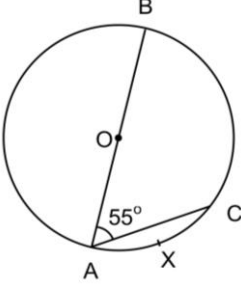
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
59	45	K	O is the center of the circle in the figure below. If $m(\angle XOY) = 60^\circ$, what is $m(\angle XZY)$?		30°	120°	180°	300°	A
60	45	K	In circle O at the right, $m(\angle ABC) = 35^\circ$. What is $m(\angle AOC)$?		120°	90°	70°	35°	C
61	45	K	If O is the center of the following circle and if $m(\angle ABC) = 80^\circ$, then what is $m(\angle AOC)$?		40°	80°	120°	160°	D
62	45	K	In the figure below, O is the center of the circle. If $m(\angle ABC) = 50^\circ$ then what is the degree measure of the central angle?		25°	75°	100°	120°	C

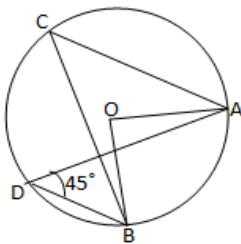
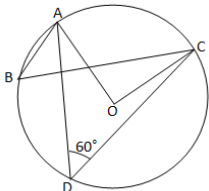
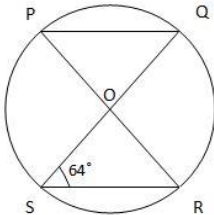
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
63	45	K	In the figure below, O is the center of the circle . If $m(\angle ABC)=80^\circ$, then what is the value of $m(\angle AOC)$?		80°	100°	150°	160°	D
64	45	K	In the figure given below, find the measure of central angle ROZ.		35°	40°	70°	80°	C
65	45	K	If O is the center of the circle, what is the value of m?		30°	60°	75°	80°	A
66	45	K	In the figure below, O is the center of the circle. Then what is the measure of $\angle ABC$?		15°	30°	45°	60°	B

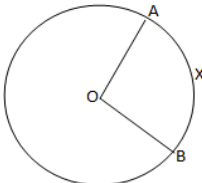
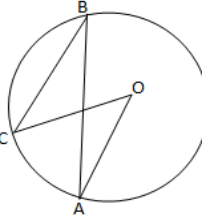
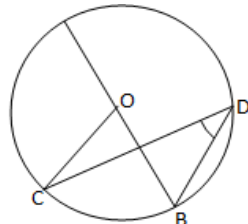
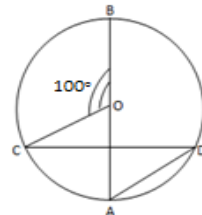
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
67	45	K	In the figure below, O is the center of the circle. If $m(\angle AOC) = 50^\circ$, what is $m(\angle ABC)$?		25°	50°	75°	100°	A
68	45	K	The measure of the central angle SOR is 80° . Then find $m(\angle SPR)$.		30°	40°	60°	80°	B
69	45	K	For a given circle O, determine the value of x.		35°	55°	70°	125°	C
70	45	K	In the figure below, O is the center of the circle and $m(\angle AOC) = 110^\circ$. What is $m(\angle ADC)$?		45°	55°	90°	110°	B

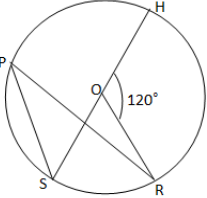
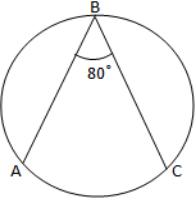
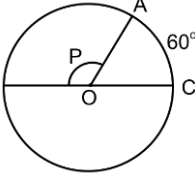
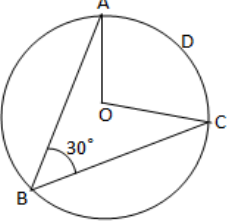
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
71	45	K	If the measure of the central angle AOB is 56° , then what is the measure of angle ACB?		28°	56°	112°	124°	A
72	45	K	O is the center of the circle. If $m(\angle AOC) = 56^\circ$ then what is $m(\angle ABC)$?		28°	56°	84°	112°	A
73	45	K	The measure of the central angle AOB = 64° . Then what is the measure of angle APB?		32°	36°	42°	48°	A
74	45	K	In the figure, if $m(\angle ACD) = 24^\circ$, what is $m(\angle ABD)$?		12°	24°	45°	48°	B

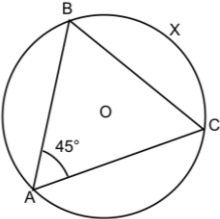
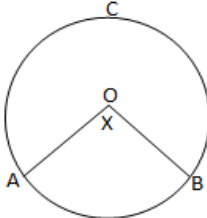
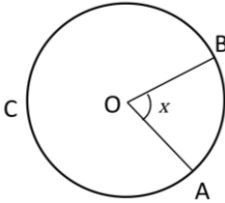
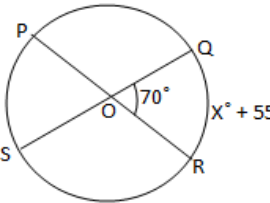
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
75	45	K	Find the values of x and y.		12° and 16°	24° and 32°	36° and 48°	48° and 64°	B
76	45	K	In the figure below, O is the center of the circle. If $m(\angle B) = 120^\circ$, then what is the measure of angle ADC?		60°	110°	120°	240°	A
77	45	K	In circle O at the right, if AC is the diameter of circle O, what is $m(\angle ABC)$?		180°	120°	90°	60°	C
78	45	K	What is the measure of an angle inscribed in a semi-circle?		60°	90°	120°	150°	B

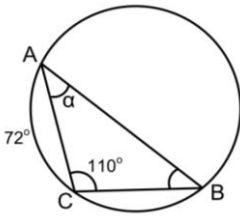
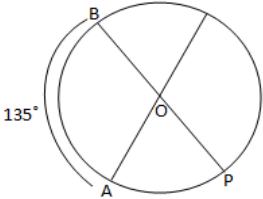
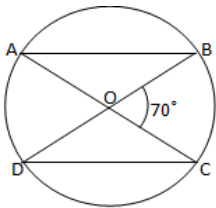
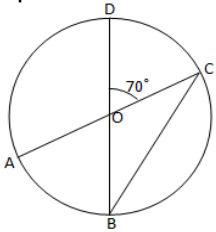
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
79	45	K	In the figure below O is the center of the circle . If $m(\angle ACB)=48^\circ$, what is the measure of angle ABC?		24°	42°	48°	96°	B
80	45	K	In the figure below, O is the center of the circle. What is the value of x?		308°	128°	52°	26°	D
81	45	K	In circle O with diameter AB as shown in the figure to the right, $m(\angle BAC)=55^\circ$. What is the degree measure of arc AXC?		55°	70°	110°	125°	B

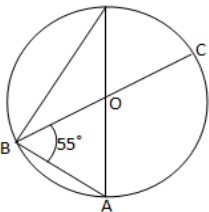
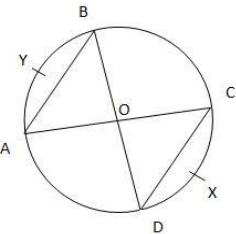
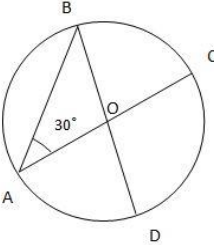
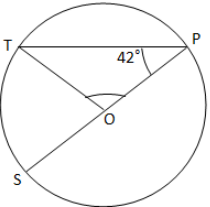
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
82	45	K	In the figure shown below, O is the center of the circle. Which of the following is true?		$m(\angle AB) = 45^\circ$	$m(\angle BCA) = m(\angle AOB)$	$m(\angle AOB) = 90^\circ$	$m(\angle AOB) = \frac{1}{2} m(\angle BCA)$	C
83	45	K	In the figure below, O is the center of the circle, where $m(\angle ADC) = 60^\circ$. Then which one is the correct statement?		$m(\angle ABC) = 30^\circ$	$m(\angle AOC) = 60^\circ$	$m(\angle BDC)$ is twice of $m(\angle AC)$	$m(\angle AC)$ is twice of $m(\angle BDC)$	C
84	45	K	In the figure below, O is the center of the circle. Which of the following is true?		$m(\angle RPQ) = 52^\circ$	$m(\angle ROQ) = 52^\circ$	$m(\angle POQ) = 52^\circ$	$m(\angle SR) \equiv m(\angle RQ)$	C

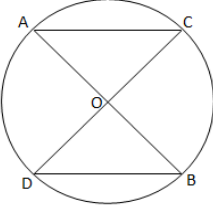
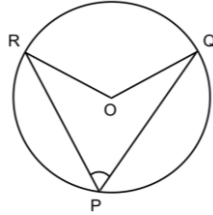
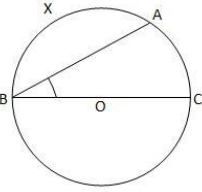
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
85	45	K	If the figure below is a circle with center at O and $m(\text{arc AXB})=120^\circ$, then $m(\angle AOB)$ is:		60°	120°	180°	240°	B
86	45	K	In the figure to the right, O is the center of the circle. If $m(\angle AOC)=40^\circ$, then what is $m(\text{arc AC})$?		20°	40°	80°	320°	B
87	45	K	In the figure, O is the center of the circle and $m(\angle BOC)=60^\circ$. What is $m(\angle BDC)$?		30°	60°	90°	120°	A
88	45	K	In the figure below, O is the center of the circle and $m(\angle BOC)=100^\circ$. Then what is $m(\angle ADC)$?		40°	50°	80°	100°	A

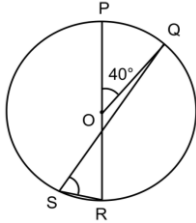
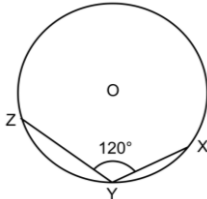
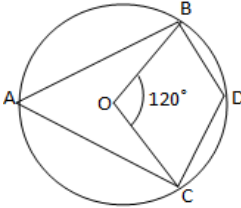
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
89	45	K	In the figure given below, O is the center of the circle and $m(\angle HOR)=120^\circ$. What is $m(\angle SPR)$?		30°	60°	80°	120°	A
90	45	K	In the circle below, if $m(\angle ABC)=80^\circ$, what is the measure of arc AC?		40°	80°	160°	200°	C
91	45	K	In the figure below, O is the center of the circle and $m(\text{arc AC})=60^\circ$. Then find the central angle P.		100°	120°	130°	140°	B
92	45	K	In the figure below, if $\angle B=30^\circ$, then what is the value of arc ADC?		15°	30°	60°	300°	C

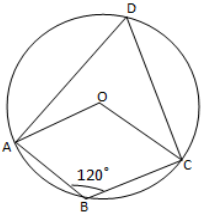
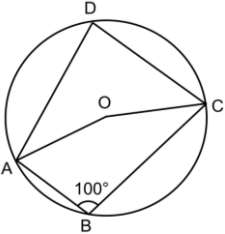
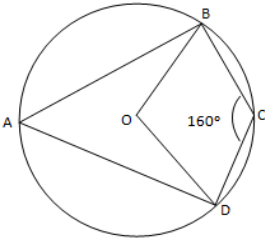
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
93	45	K	In the figure to the right, $m(\angle BAC) = 45^\circ$. What is the measure of arc BXC?		120°	90°	75°	45°	B
94	45	K	In circle O, if the major arc $ACB = 280^\circ$ as shown in the figure, then what is the value of X?		160°	120°	80°	40°	C
95	45	K	In circle O shown bellow, if the measure of the major arc $ACB = 280^\circ$, what is the measure of the angle marked by x?		80°	60°	40°	20°	A
96	45	K	In the figure below, O is the center of the circle. If $m(\angle QOR) = 70^\circ$ and $m(\text{arc } QR) = x^\circ + 55^\circ$, then what is the value of x in degrees?		15°	20°	70°	125°	A

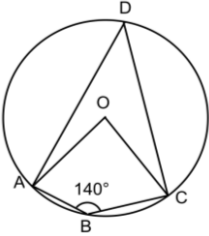
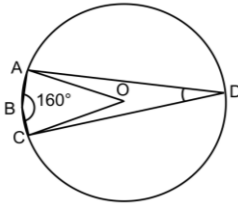
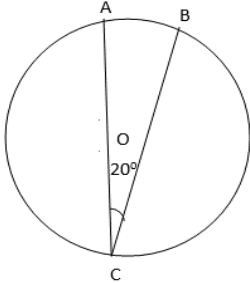
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
97	45	K	In the figure below, find the value of α .		34°	36°	70°	72°	A
98	45	K	O is the center of a circle and $m(\text{arc AB})=135^\circ$. Then what is $m(\angle AOP)$?		17.5°	22.5°	35°	45°	D
99	45	K	If O is the center of the following circle and $m(\angle BOC)=70^\circ$ then what is $m(\text{arc AB})$?		35°	70°	110°	140°	C
100	45	K	Which of the following is true about the figure to the right if O is the center?		$m(\angle AOB)=35^\circ$	$m(\angle ACB)=35^\circ$	$m(\angle DBC)=70^\circ$	$m(\angle ACB)=70^\circ$	B

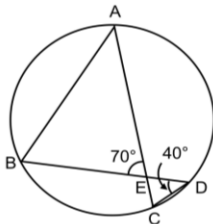
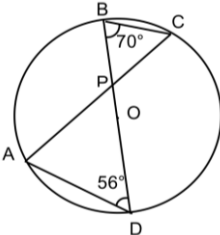
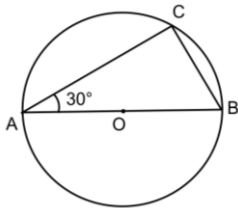
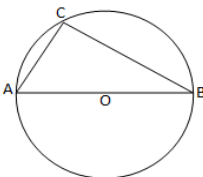
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
101	45	K	In the figure below, O is the center of a circle and $m(\angle ABC) = 55^\circ$. Then find the central angle AOB.		50°	60°	70°	80°	C
102	45	A	In circle O at the right, $m(\text{arc AYB}) = 90^\circ$. Which of the following is true?		$m(\angle AOB) \neq m(\angle BOC)$	$m(\angle ABD) \neq m(\angle CDB)$	$m(\text{arc AYB}) \neq m(\text{arc DXC})$	$m(\text{arc ABC}) = m(\text{arc BCD})$	D
103	45	A	In circle O at the right, $m(\angle BAC) = 30^\circ$. What is $m(\angle AOB)$?		60°	70°	120°	140°	C
104	45	A	In the figure given below, O is the center of the circle and $m(\angle SPT) = 42^\circ$. Then find the measure of central angle POT.		84°	94°	96°	100°	C

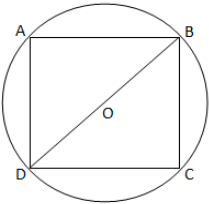
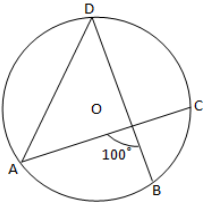
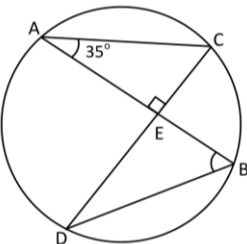
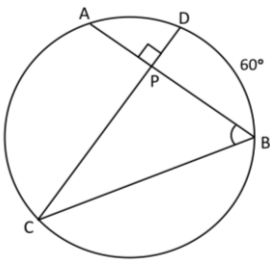
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
105	45	A	If O is the center of the circle below and if $m(\angle ACD)=50^\circ$, what is the measure of arc DB?		25°	50°	80°	100°	C
106	45	A	In the figure below, O is the center of the circle and measure of arc RPQ is 240° . Find $m(\angle RPQ)$.		30°	60°	120°	180°	B
107	45	A	In circle O at the right, $m(\text{arc } AXB)=110^\circ$. Find the measure of $\angle ABC$.		70°	60°	45°	35°	D

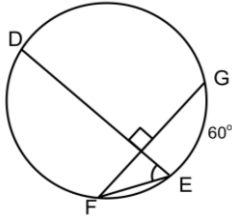
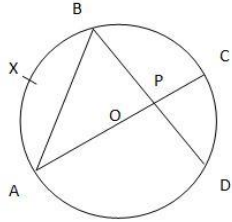
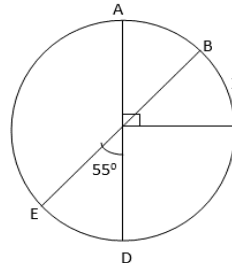
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
108	45	A	In the figure below, O is the center of the circle and $m(\angle POQ) = 40^\circ$. What is $m(\angle RSQ)$?		35°	70°	140°	28°	B
109	45	A	In the figure below, O is the center of the circle. If $m(\angle XYZ) = 120^\circ$ then find $m(\text{arc } XYZ)$.		60°	120°	180°	240°	B
110	45	A	In the figure below, O is the center of the circle and $m(\angle BOC) = 120^\circ$. Then $m(\angle BDC) =$ _____.		360°	240°	120°	60°	C

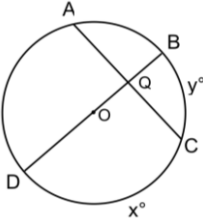
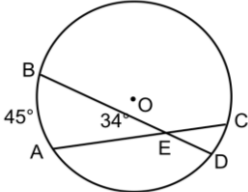
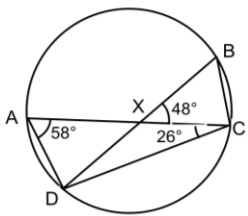
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
111	45	A	In the figure to the right, O is the center and $m(\angle ABC)=120^\circ$, then what is $m(\text{arc } ABC)$?		59°	60°	118°	120°	D
112	45	A	In the figure to the right, O is the center and $m(\angle ABC)=100^\circ$. Then what is $m(\angle AOC)$?		20°	40°	80°	160°	D
113	45	A	O is the center in the figure to the right and $m(\angle BCD)=160^\circ$. What is the degree measure of $\angle BAD$?		20°	30°	40°	60°	A

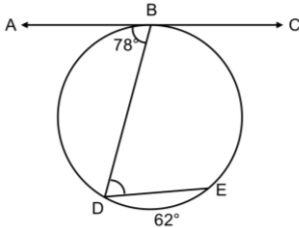
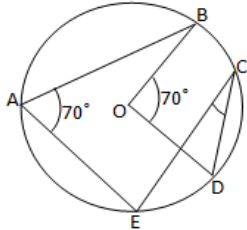
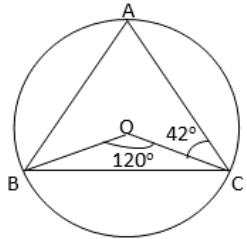
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
114	45	A	In the figure below, $m(\angle ABC) = 140^\circ$. Then what is $m(\angle ADC)$?		40°	70°	80°	140°	A
115	45	A	Given circle O with $m(\angle ABC) = 160^\circ$, what is $m(\angle ADC)$?		20°	40°	80°	100°	A
116	45	A	Given circle O below, what is $m(\text{arc } ACB)$?		20°	40°	320°	340°	C

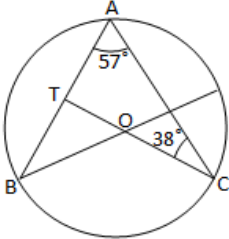
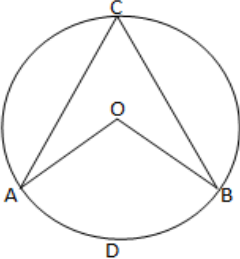
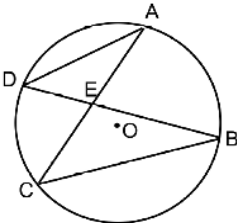
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
117	45	A	Given the circle below where $m(\angle AEB) = 70^\circ$ and $m(\angle CDE) = 40^\circ$. What is $m(\text{arc AD})$?		40°	70°	80°	140°	D
118	45	A	In the figure below, O is the center of the circle. Then what is $m(\angle APB)$?		112°	126°	140°	160°	B
119	45	A	In the figure, if O is the center of the circle and $m(\angle BAC) = 30^\circ$, then what is $m(\angle ABC)$?		40°	60°	80°	100°	B
120	45	A	In the figure, O is the center of the circle. If $m(\text{arc AC}) = 80^\circ$, what is $m(\angle BAC)$?		40°	50°	80°	100°	B

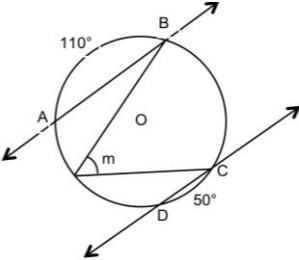
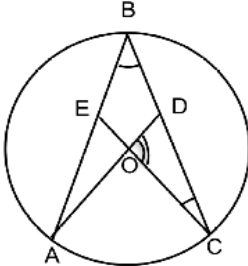
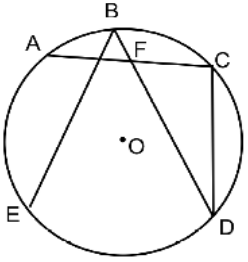
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
121	45	A	In the circle below, if O is the center, $m(\widehat{BC})=70^\circ$ and $AB \parallel DC$, then what is $m(\angle DBA)$?		35°	55°	70°	110°	A
122	45	A	In the figure to the right, Arc AB is one half of arc DC. The measure of $\angle ADB$ is _____.		100°	80°	$(200/3)^\circ$	$(100/3)^\circ$	D
123	45	A	In the figure below, if $m(\angle AED)=90^\circ$ and $m(\angle BAC)=35^\circ$, what is $m(\angle ABD)$?		50°	55°	60°	70°	B
124	45	A	In the figure to the right, if AB is perpendicular to CD and $m(\widehat{DB})=60^\circ$, what is $m(\angle ABC)$?		60°	80°	90°	120°	A

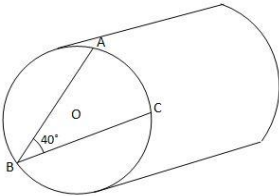
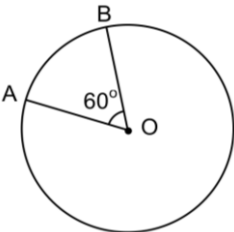
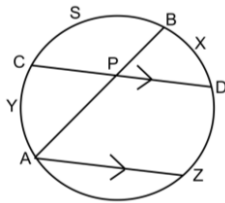
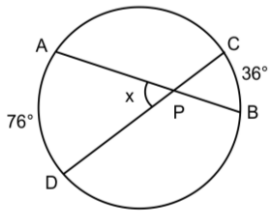
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
125	45	A	In the figure below $DE \perp FG$ and $m(\text{arc } GE) = 60^\circ$. Find $m(\angle DEF)$.		30°	60°	90°	120°	B
126	45	A	In the figure to the right, $m(\angle ABD) = 60^\circ$ and $m(\angle APB) = 90^\circ$. What is $m(\angle AXB)$?		60°	80°	90°	120°	D
127	45	A	In the figure below, find $m(\text{arc } BXC)$.		35°	45°	55°	90°	A

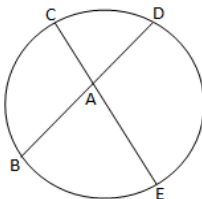
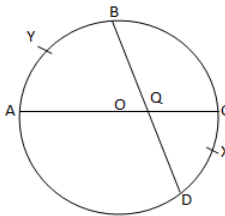
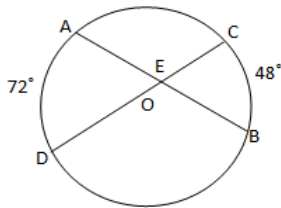
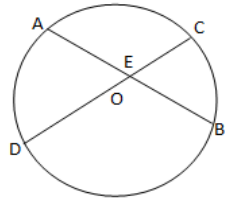
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
128	45	A	In circle O at the right, chords AC and BD intersect at Q, $m(\text{arc DA}) \cong m(\text{arc CD}) = x^\circ$ and $m(\text{arc AB}) \cong m(\text{arc BC}) = y^\circ$. If $x = 2y$, find $m(\angle AQB)$.		120°	90°	60°	30°	B
129	45	A	In the figure below, if $m(\text{arc AB}) = 45^\circ$ and $m(\angle AEB) = 34^\circ$, which of the following is the measure of arc CD?		68°	38°	23°	9°	C
130	45	A	If in the figure to the right, $m(\angle DAX) = 58^\circ$, $m(\angle BXC) = 48^\circ$, and $m(\angle DCX) = 26^\circ$. Then what is $m(\angle ACB)$?		64°	74°	84°	116°	B

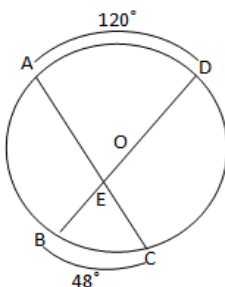
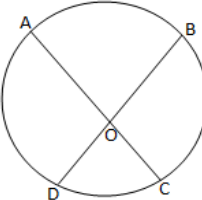
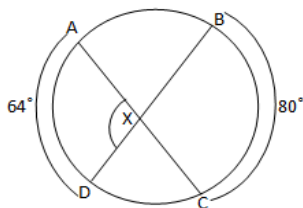
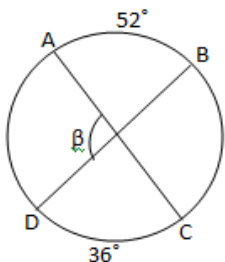
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
131	45	A	In the circle below, if AC is tangent to the circle at B and $m(\angle DBA) = 78^\circ$ and $m(\widehat{DE}) = 62^\circ$, then find $m(\angle BDE)$.		71°	124°	142°	156°	A
132	45	A	In the figure below, O is the center of the circle where $m(\angle BAE) = 70^\circ$ and $m(\angle BOD) = 70^\circ$. Find $m(\angle ECD)$.		35°	70°	105°	140°	A
133	45	A	Given circle O, $m(\angle BOC) = 120^\circ$ and $m(\angle ACO) = 42^\circ$. What is the value of $m(\angle ABO)$?		18°	20°	22°	24°	A

S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
134	45	A	In the figure below, O is the center of the circle. $m(\angle BAC) = 57^\circ$, then what is the value of $m(\angle BOC)$?		57°	76°	114°	95°	C
135	45	A	In the figure below, if O is the center of the circle and $m(\angle AOB) = 90^\circ$, then which of the following is true?		$m(\angle ACB) = 270^\circ$	$m(\text{arc } ADB) = 180^\circ$	$m(\angle ACB) + m(\angle ADB) = 130^\circ$	$m(\angle ACB) + m(\angle ADB) = 180^\circ$	D
136	45	A	In the circle O given below, if $m(\angle AEB) = 70^\circ$ and $m(\angle ADB) = 50^\circ$ then what is $m(\text{arc } DC)$?		40°	60°	70°	85°	A

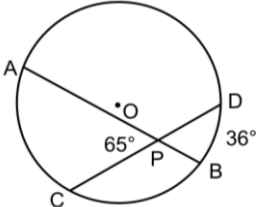
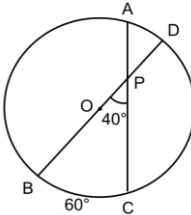
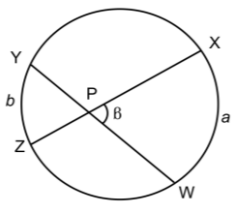
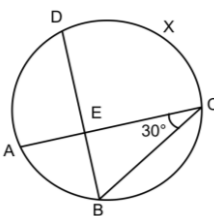
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
137	45	A	In the figure to the right, O is the center of the circle, $AB \parallel DC$, $m(\text{arc } AB) = 110^\circ$, and $m(\text{arc } DC) = 50^\circ$. Then the value of m is _____.		50°	110°	160°	200°	A
138	45	A	In the following circle, O is the center and $m(\angle ABC) = 42^\circ$ and $m(\angle ECB) = 38^\circ$, then what is $m(\angle DOC)$?		38°	42°	84°	96°	D
139	45	A	If O is the center of a circle and if $m(\angle CDB) = 30^\circ$ and $m(\angle ACD) = 100^\circ$ then find $m(\angle BFC)$.		60°	65°	130°	200°	C

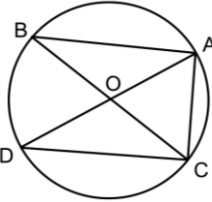
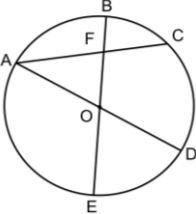
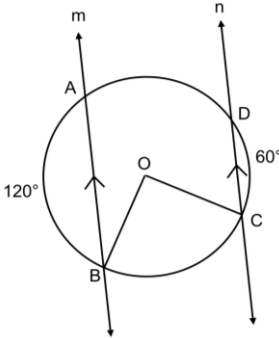
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
140	45	A	If O is the center of the circle in the figure to the right and it represents the cross section of a pipe, what is the measure of arc ABC in degrees?		40°	80°	280°	320°	C
141	45	A	In the figure below OA and OB are radii of circle O, then which of the following is true?		$\overline{AB} = \overline{OB}$	$\overline{AB} > \overline{OA}$	$\overline{AB} < \overline{OB}$	$\overline{AB} = 2\overline{OA}$	A
142	46	K	If chords AB and CD intersect at P inside a circle as shown below, which of the following is true about this circle?		$m(\angle APC) = \frac{1}{2}m(\angle AYD) + \frac{1}{2}m(\angle CSB)$	$m(\angle APC) = \frac{1}{2}m(\angle AYC) + \frac{1}{2}m(\angle BXD)$	$m(\angle APC) = \frac{1}{2}m(\angle AYC)$	$m(\angle APC) = \frac{1}{2}m(\angle AZD)$	B
143	47	K	In the given circle, if $m(\text{arc } AB) = 76^\circ$ and $m(\text{arc } BC) = 36^\circ$, what is the measure of angle x?		18°	36°	56°	73°	C

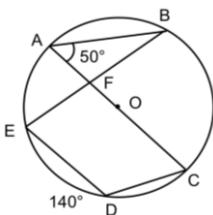
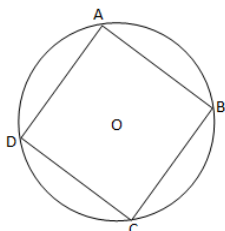
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
144	47	K	What is the measure of $\angle CAD$ if $m(\text{arc } CD)=60^\circ$ and $m(\text{arc } BE)=100^\circ$ as given below?		30°	60°	80°	120°	C
145	47	K	In the figure to the right, if $m(\angle DXC)=60^\circ$ and $m(\angle BYA)=100^\circ$, what is $m(\angle AQD)$?		120°	100°	80°	60°	B
146	47	K	If O is the center of the circle and chords AB and CD intersect at E as shown below, what is $m(\angle CEB)$?		48°	60°	72°	120°	B
147	47	K	In the following circle, O is the center and chords AB and CD intersect at E. If $m(\angle CEB)=80^\circ$ and $m(\text{arc } AD)=90^\circ$, then what is $m(\text{arc } CB)$?		40°	45°	70°	90°	C

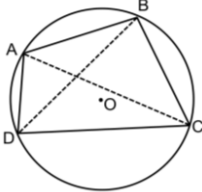
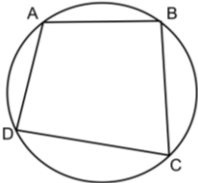
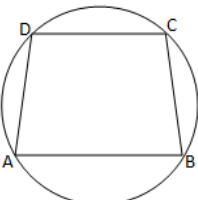
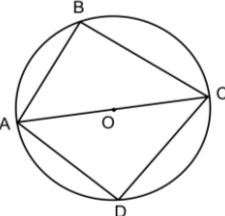
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
148	47	K	What is the measure of $\angle DEA$ in the figure below?		84°	96°	168°	192°	A
149	47	K	In the figure given to the right, O is the center of the circle, $m(\text{arc } AB)=60^\circ$ and $m(\text{arc } DC)=40^\circ$. Then what is $m(\angle AOB)$?		40°	50°	60°	100°	B
150	47	K	In the figure below, find the degree measure of $\angle AXD$.		32°	40°	72°	90°	C
151	47	K	If $m(\text{arc } AB)=52^\circ$ and $m(\text{arc } CD)=36^\circ$ as shown in the figure below, what is the value of β ?		16°	44°	88°	136°	D

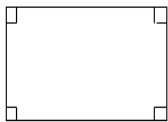
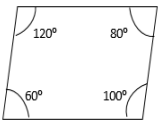
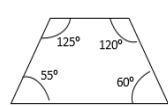
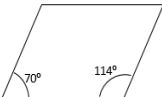
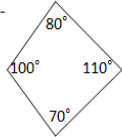
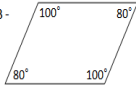
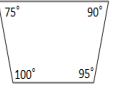
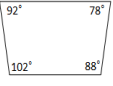
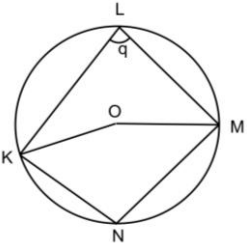
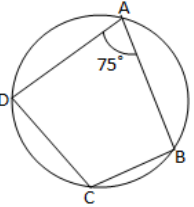
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
152	47	A	In the figure below, $m(\text{arc AD})$ is 165° and $m(\text{arc BC})$ is 55° . What is the value of angle Θ ?		55°	70°	110°	220°	B
153	47	K	In the figure to the right, QS and PR are chords and $m(\angle PTQ) = 50^\circ$. What is the measure of $\angle PTS$?		50°	100°	130°	260°	C
154	47	K	In the figure to the right, if $m(\angle APD) = 50^\circ$ and $m(\text{arc BRC}) = 40^\circ$, what is the measure of arc DSA?		60°	50°	40°	30°	A
155	47	K	In the figure below, if $m(\angle XPS) = 30^\circ$ and $m(\text{arc SX}) = 40^\circ$, what is the measure of arc TY?		60°	50°	40°	20°	D

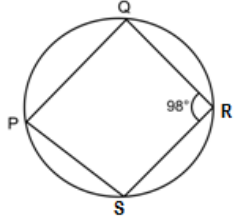
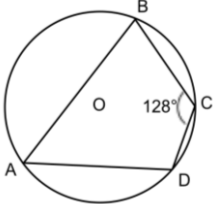
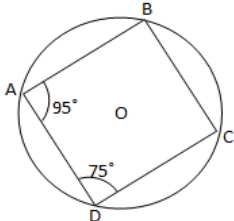
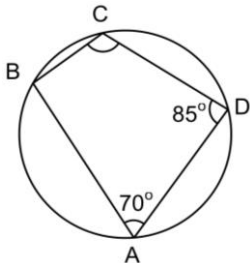
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
156	47	K	In the circle below, the measure of $\angle APC = 65^\circ$ and $m(\text{arc } BD) = 36^\circ$. What is $m(\text{arc } AC)$?		36°	65°	94°	130°	C
157	47	K	In the figure shown below, O is the center of the circle. If $m(\text{arc } BC) = 60^\circ$ and $m(\angle BPC) = 40^\circ$, find $m(\text{arc } AD)$.		20°	40°	60°	80°	A
158	47	K	In the figure below, if $m(\text{WX}) = a$ and $m(\text{YZ}) = b$ and $m(\angle XPW) = \beta$, which one of the following statements is correct?		$a - b = \beta$	$a + b = \beta$	$(a + b)/2 = \beta$	$a + b = \beta/2$	C
159	47	A	Two chords AC and BD intersect at point E in a circle. If $m(\angle ACB) = 30^\circ$ and $m(\text{arc } CXD) = 120^\circ$, what is the measure of $\angle AEB$?		30°	60°	75°	90°	D

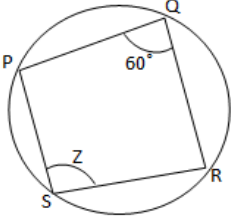
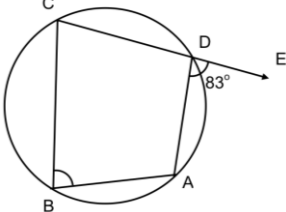
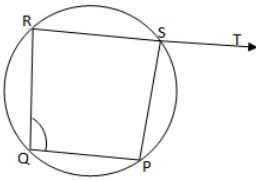
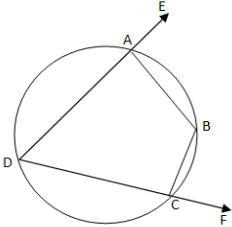
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
160	47	A	In the figure below, O is the center of the circle and $m(\angle AOC) = 70^\circ$. Which of the following is NOT true?		$m(\angle ABC) = 35^\circ$	$m(\angle ACB) = 55^\circ$	$m(\angle BCD) = 35^\circ$	$m(\angle ADC) = 70^\circ$	D
161	47	A	In the circle given below, O is the center and $m(\widehat{BC}) = 40^\circ$, $m(\angle AOE) = 120^\circ$. Then what is $m(\angle EFC)$?		80°	100°	120°	140°	B
162	47	A	Given circle O where $m(\widehat{AB}) = 120^\circ$, $m(\widehat{DC}) = 60^\circ$ and m and n are parallel secant lines. What is $m(\angle BOC)$?		45°	60°	90°	180°	C

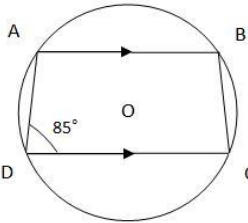
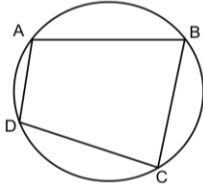
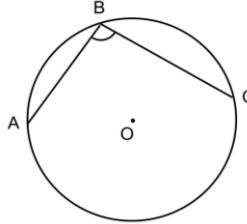
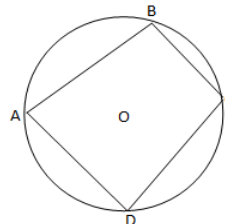
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
163	47	A	O is the center of the circle given below and AC and BE intersect at F. If $m(\angle BAC)=50^\circ$ and $m(\angle CDE)=140^\circ$, then find $m(\angle AFB)$.		50°	70°	80°	110°	D
164	48	K	A quadrilateral inside a circle is called a cyclic quadrilateral if _____.		all its angles are right angles	all its vertices lie on the circle	one of its sides passes through the center	the diagonals meet at the center	B
165	48	K	If four different points on the circle are joined end to end without crossing each other, what kind of figure can be formed?		A rhombus	A rectangle	A parallelogram	A cyclic quadrilateral	D
166	49	K	Which one is correct about a cyclic quadrilateral?		Opposite sides of a cyclic quadrilateral are congruent	All sides of a cyclic quadrilateral are equal	A cyclic quadrilateral is inscribed in a circle	Adjacent angles of a cyclic quadrilateral are supplementary	C
167	49	K	Which of the following is true about a cyclic quadrilateral?		Opposite sides are congruent	Opposite angles are congruent	Opposite sides are parallel	Opposite angles are supplementary	D

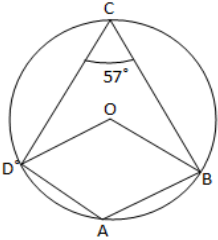
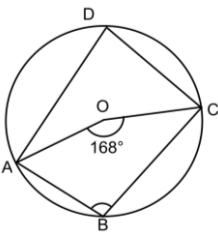
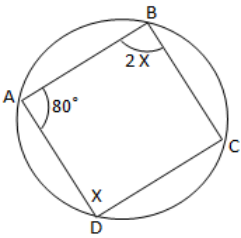
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
168	49	K	In the figure to the right, ABCD is a quadrilateral inscribed in a circle with center at O. Which is correct about the inscribed quadrilateral ABCD?		$\angle DBA$ is inscribed in Arc CD	$\angle ADC$ is a right angle	$\angle DAC$ and $\angle ABC$ are supplementary	$\angle DAB$ and $\angle DCB$ are supplementary	D
169	49	K	In the figure shown below, ABCD is a quadrilateral inscribed in a circle. Which one is the correct statement?		$m(\angle ABC) = 180^\circ - m(\angle ADC)/2$	$m(\angle ABC) + m(\angle ADC) = 180^\circ$	$m(\angle ABC) + m(\angle CBA) = 180^\circ$	$m(\angle ABC)/2 + m(\angle ADC)/2 = 180^\circ$	B
170	49	K	In the figure below, ABCD is a quadrilateral inscribed in a circle. Then which one of the following is true about the cyclic quadrilateral?		$m(\angle D) + m(\angle C) = 180^\circ$	$m(\angle A) + m(\angle C) = 180^\circ$	$m(\angle D) + m(\angle B) = 360^\circ$	$m(\angle A) + m(\angle B) = 360^\circ$	B
171	49	K	In circle O at the right, AC is the diameter of the circle. Which of the following is always correct about quadrilateral ABCD?		$m(\angle BAC) = m(\angle BCA)$	$m(\angle ABC) = m(\angle ADC)$	$m(\angle AD) + m(\angle DC) = 90^\circ$	$\triangle ABC$ is an isosceles triangle	B

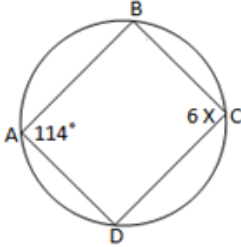
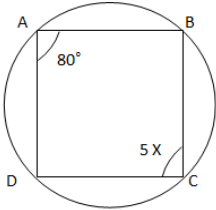
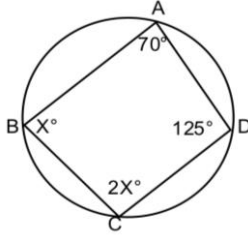
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
172	49	K	From the following figures which one is a cyclic quadrilateral?						A
173	49	K	Which one of the following figures represents a cyclic quadrilateral?		A - 	B - 	C - 	D - 	D
174	49	A	In circle O and quadrilateral KLMN, if $m(\angle KLM) = q$, then which of the following is NOT true?		$m(\angle KNM) = 180^\circ - q$	$m(\angle KOM) = 2q$	$m(\text{arc } NM) = q$	$m(\angle LKN) + m(\angle LMN) = 180^\circ$	C
175	51	K	ABCD is a cyclic quadrilateral. If $m(\angle DAB) = 75^\circ$, then $m(\angle BCD) = \underline{\hspace{2cm}}$.		15°	75°	105°	285°	C

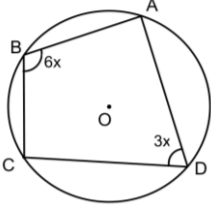
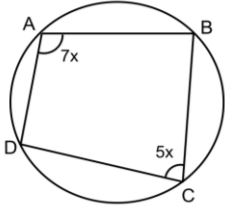
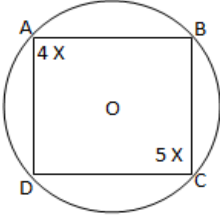
S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
176	51	K	In the figure to the right, if $m(\angle QRS) = 98^\circ$, find $m(\angle QPS)$.		108°	98°	82°	72°	C
177	51	K	In the figure below, O is the center of the circle. If $m(\angle BCD) = 128^\circ$, find $m(\angle BAD)$.		52°	64°	90°	116°	A
178	51	K	If ABCD is a cyclic quadrilateral as shown below and if $m(\angle A) = 95^\circ$ and $m(\angle D) = 75^\circ$, then what is $m(\angle B)$?		75°	85°	95°	105°	D
179	51	K	If ABCD given below is a cyclic quadrilateral and if $m(\angle A) = 70^\circ$, $m(\angle D) = 85^\circ$ then find $m(\angle C)$.		85°	95°	110°	155°	C

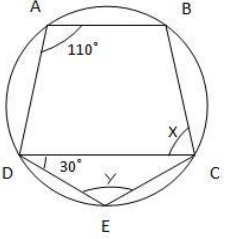
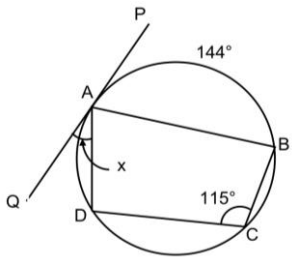
S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
180	51	K	In the figure given below, PQRS is a cyclic quadrilateral. Then find the value of Z.		120°	140°	150°	160°	A
181	51	K	In the figure below, ABCD is a cyclic quadrilateral. E is on CD. If $m(\angle ADE) = 83^\circ$, what is $m(\angle ABC)$?		83°	97°	166°	194°	A
182	51	K	In the following figure, PQRS is a cyclic quadrilateral and T is on RS. If $m(\angle PST) = 110^\circ$, then what is $m(\angle PQR)$?		35°	55°	70°	110°	D
183	51	K	In the circle below, if points A, B, C, and D are on the circle and $m(\angle BAE) = 130^\circ$, then find $m(\angle DCB)$.		50°	65°	100°	130°	D

S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
184	51	K	In the figure to the right, ABCD is a cyclic trapezium with $AB \parallel DC$. If $\angle ADC = 85^\circ$, what is the measure of $\angle DAB$?		85°	95°	135°	275°	B
185	51	A	In the figure to the right, ABCD is a cyclic quadrilateral and $m(\angle ABC) = 210^\circ$. What is $m(\angle ADC)$?		105°	80°	75°	60°	C
186	51	A	In the figure below, $m(\text{arc } ABC) = 160^\circ$. Then what is $m(\angle ACB)$?		80°	100°	160°	200°	B
187	51	A	In the figure to the right, ABCD is a quadrilateral. If $m(\angle DCB)$ is 3 times larger than $m(\angle DAB)$, what is the measure of $\angle DCB$?		180°	135°	90°	45°	B

S.N.	Com- peten- cy No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
188	51	A	The measure of the opposite angles of a cyclic quadrilateral are in the ratio 2:3. What is the measure of the smallest of these angles?		36°	54°	72°	108°	C
189	51	A	In the figure below, ABCD is a cyclic quadrilateral and O is the center of the circle. What is $m(\angle BAD)$?		114°	123°	132°	246°	B
190	51	A	Given circle O and cyclic quadrilateral ABCD, if $m(\angle AOC) = 168^\circ$ then what is $m(\angle ABC)$?		84°	96°	168°	180°	B
191	51	A	In the following figure, if ABCD is a cyclic quadrilateral, what is the value of x?		60°	80°	100°	120°	A

S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
192	51	A	If ABCD is a cyclic quadrilateral as shown, find the value of x.		11	14	18	48	A
193	51	A	ABCD is a cyclic quadrilateral in the figure below. Then what is the value of x?		20°	80°	100°	43°	A
194	51	A	In the figure below, find the value of x.		140°	110°	55°	35°	C

S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
195	51	A	ABCD is an inscribed cyclic quadrilateral as shown in the figure below where O is the center of the circle. Find $m(\angle ADC)$.		20°	60°	90°	120°	B
196	51	A	If in the figure, ABCD is a cyclic quadrilateral, then find the value of x.		10°	15°	20°	25°	B
197	51	A	ABCD is an inscribed quadrilateral as shown in the figure below. What is the value of $m(\angle BAD)$?		20°	80°	100°	180°	B

S.N.	Competency No.	Level (K or A)	Stem	Figure/Table	A	B	C	D	Key
198	51	A	In the figure to the right, ABCD is a cyclic quadrilateral and $m(\angle DAB) = 110^\circ$, $m(\angle CDE) = 30^\circ$ and $\triangle DCE$ is isosceles. Then the value of x and y respectively are _____.		60° and 120°	70° and 110°	70° and 120°	80° and 100°	C
199	51	A	In the figure below, ABCD is a cyclic quadrilateral and PQ is tangent to the circle at point A. If $m(\angle C) = 115^\circ$ and $m(\text{arc } AB) = 144^\circ$, what is the value of x?		43°	50°	65°	72°	A