

		GURU Na	NAK MATHS	<u>ACADEMY</u>				
Roll No		M.G. ROAD NEAF	HDFC BANK SAFIDON-126	112, 9729630333 .	. M.M. – 39			
10 <sup>TH</sup> MATHS		•	Class Test ( CHAPTER 12 <sup>TH</sup> )					
All quest	tions are compulsory:-	:	Section – I (One marks questi	ions)				
1.			wheel of radius 0.7 m in rollin					
	(a) 22	(b) 24	(c) 75	(d) 40				
2.			14 cm with E, F, G and H as th	e mid				
	points of sides AB, BC	, CD and DA respectively. I	he area of the shaded portion is					
	Н	(a) 44cm <sup>2</sup>	(b) $49 \text{ cm}^2$					
		(c) 98 cm <sup>2</sup>	(d) $49\pi/2 \text{ cm}^2$					
3.	If the circumference		er of a square are equal, then					
	<ul><li>(A) Area of the circle</li><li>(C) Area of the circle</li></ul>		(B) Area of the circle > Area of (D) Nothing definite can be said	the square d about the relation between the area	s of the circle and square.			
4.	It is proposed to build locality. The radius of			s of two circular parks of diameter				
5.	` '	e that can be inscribed in a	(d) 24 m					
5.	(a) $36\pi$ cm <sup>2</sup>	(b) $18\pi$ cm <sup>2</sup>	square of side of chi is $(c) 12\pi cm^2$	(d) $9\pi$ $cm^2$				
6.	The area of the squar	re that can be inscribed in	a circle of radius 8 cm is					
	(a) $256 cm^2$	(b) $128 cm^2$	(c) $642 cm^2$	(d) none of these				
7.	The radius of a circle	whose circumference is ed	qual to the sum of the circumf	ferences of the two circles of diame	ters 36 cm and 20 cm is			
	(a) 56 cm	(b) 42 cm	(c) 28 cm	(d) 16 cm				
8.	The diameter of a cir	cle whose area is equal to t	the sum of the areas of the tw	o circles of radii 24 cm and 7 cm is				
	(a) 31 cm	(b) 25 cm	(c) 62 cm	(d) 50 cm				
9.	In Fig., a circle is inse	cribed in a square of side 5	cm and another circle is circ	umscribing the square. The ratio o	of area of the outer circle			
	the inner circle is:			<del>\</del>				
	(a) 2:1	(b) 1 : 2	(	1)				
	(c) 5:25	(d) none of these		<b>V</b>				
10.	The perimeter of a so	quare circumscribing a circ	ele of radius a cm	,				
	(a) 3a cm	(b) 5a cm	(c) 8a cm	(d) a cm				
11.		of circle of radius 21 cm an						
	(a) $441 cm^2$	(b) $462 cm^2$	(c) $642 cm^2$	(d) none of these				
12.	If the area of a sector (a) $3 \pi$ cm	of a circle of radius 36 cm (b) 5 $\pi$ cm	is 54 $\pi$ cm <sup>2</sup> . Then the length (c) 8 $\pi$ cm	of the corresponding arc of the sec (d) none of these	tor is:			
13.	Find the area of the flower bed (with semi-circular ends) shown in figure:							
	(a) $380 \ cm^2$	(b) $380 + 25\pi \ cm^2$		↑ 10 cm				
	(c) $380 + 5\pi cm^2$	(d) none of these	∠8 m					
14.	Find the area of the s	haded field shown in figur	<b>7777</b> 1					
	(a) $48 + 4\pi \ cm^2$	(b) $32 + 9\pi cm^2$	6 m	↓ m ↓				
	(c) $32 + 4\pi \ cm^2$	(d) none of these						
15.	Floor of a room is of dimensions 5 m $\times$ 4 m and it is covered with 80 circular tiles of diameters 50 cm each as shown in Figure Find							
	area of floor that ren	nains uncovered with tiles.	← 5 cm	I ↑				
	(a) $43000 cm^2$	(b) $200000 cm^2$						
	(c) $4300 \ cm^2$	(d) none of these			4 cm			
16.	The ratio of the areas	s of the incircle and circum	circle of a square is					
	(a) 1:2	(b) 1:3	(c) 1:4 (d) 1: $\sqrt{2}$		1 ↓			
17.	The perimeter of a ci	rcle having radius 5cm is e	equal to:					

18. The largest triangle inscribed in a semi-circle of radius r, then the area of that triangle is:

(c) 31.4 cm

(d) 40 cm

(b) 3.14 cm

(a) 30 cm

	(a) $r^2$ (b)	$)\frac{1}{2}r^2 $	(c) $2r^2$	(d) $\sqrt{2}r^2$					
19.	19. In a circle of radius 21 cm, an arc subtends an angle of 60° at the centre. The length of the arc is:								
	(a) 20cm (b)	) 21cm (	c) 22cm	(d) 25cm					
20.	In a circle of radius 21 cm, an arc subtends an angle of $60^{\circ}$ at the centre. The area of the sector formed by the arc is:								
	(a) $200 \text{ cm}^2$	(b) 220 cm		(c) $231 \text{ cm}^2$	(d) $250 \text{ cm}^2$				
21.	Area of a sector of angle p (in degrees) of a circle with radius R is								
	(a) $p/180 \times 2\pi R$ (b) $p/180 \times \pi R^2$ (c) $p/360 \times 2\pi R$ (d) $p/720 \times 2\pi R^2$								
22.	The wheel of a motorcycle is of radius 35 cm. The number of revolutions per minute must the wheel make so as to keep a speed of 66 km/hr will be								
	(a) 50	(b) 100		(c) 500	(d) 1000				
23.	The area of a quadra	nt of a circle with	circumferenc	e of 22 cm is					
	(a) $77 \text{ cm}^2$	(b) 77/8 cm	$n^2$	(b) $35.5 \text{ cm}^2$	(c) $77/2 \text{ cm}^2$				
24.	In a circle of radius 14 cm, an arc subtends an angle of $30^{\circ}$ at the centre, the length of the arc is								
	(a) 44 cm	(b) 28 cm		(c) 11 cm	(d) 22/3 cm				
25.	If the length of an arc of a circle of radius r is equal to that of an arc of a circle of radius 2r, then								
	(A) the angle of the corresponding sector of the first circle is double the angle of the corresponding sector of the other circle.								
	(B) the angle of the corresponding sector of the first circle is equal the angle of the corresponding sector of the other circle.								
	(C) the angle of the corresponding sector of the first circle is half the angle of the corresponding sector of the other circle.								
	(D) the angle of the corresponding sector of the first circle is 4 times the angle of the corresponding sector of the other circle.								
26.	A cow is tied with a r the cow can graze is:	ope of length 14 i	n at the cornei	of a rectangular field o	f dimensions $20m \times 16m$ , then the area of the fie	eld in which			
	(A) $154 \text{ m}^2$	(B) 156 m <sup>2</sup>	2	(C) $158 \text{ m}^2$	(D) $160 \text{ m}^2$				
27.				is 90° and radius 7 cm is					
	(a) 35 cm	(b) 25 cm		(c) 77 cm	(d) none of these				
28.	In a circle of diamete	er 42 cm, if an arc	subtends an a	ngle of 60° at the centre	where $\pi = 22/7$ then length of arc is				
	(a) 11 cm	(b) 227 cm	l	(c) 22 cm	(d) 44 cm				
29.	If the perimeter of a	semicircular prot	ractor is 72 cm	where $\pi = 227$ , then th	e diameter of protractor is				
	(a) 14 cm	(b) 33 cm		(c) 28 cm	(d) 42 cm				
30.	If the radius of a circ	le is doubled, its a	area becomes						
	(a) 2 times	(b) 4 times		(c) 8 times	(d) 16 times				
31.	If the diameter of a semicircular protractor is 14 cm, then its perimeter is :								
	(a) 27 cm	(b) 36 cm		(c) 18 cm	(d) 9 cm				
32.	A race track is in the	form of a circula	r ring whose o	uter and inner circumfe	rences are 396 m and 352 m respectively. The w	idth of the			
	track is								
	(a) 63 m	(b) 56 m		(c) 7 m	(d) 3.5 m				
33.	The area of the largest square that can be inscribed in a circle of radius 12 cm is								
	(a) 24 cm <sup>2</sup>	(b) 249 cm	2	(c) 288 cm <sup>2</sup>	(d) $196\sqrt{2} \text{ cm}^2$				
34.	If the perimeter of a	circle is equal to t	hat of a squar	e, then the ratio of their	areas is:				
	(a) 22:7	(b) 14:11		(c) 7:22	(d) 11:14				
35.	The circumference of	f two concentric c	ircles forming	a ring are 88 cm and 66	cm. Taking $\pi = 22/7$ , the width of the ring is				
	(a) 14 cm	(b) 7 cm		(c) 7/2 cm	(d) 21 cm				
36.	A steel wire when ber	nt in the form of a	square enclos	ses an area of 121 cm². I	the same wire is bent in the form of a circle, the	en the			
	circumference of the circle is:								
	(a) 88 cm	(b) 44 cm		(c) 22 cm	(d) 11 cm				
37.	The length of the mir	nute hand of a clo	ck is 14 cm. Th	ne area swept by the min	ute hand in 5 minutes is:				
	(a) 153.9 cm <sup>2</sup>	(b) 102.6 c	em²	(c) 51.3 cm <sup>2</sup>	(d) 205.2 cm <sup>2</sup>				
38.	If the area of a circle is numerically equal to twice its circumference, then the diameter of the circle is:								
	(a) 4 units	(b) 2 units		(c) 8 units	(d) none of these				
39.	Match the columns								
		Area of quadrant	(A) 1_2	(a) 1 → A, 2 → (	3 - D 1 - E				
		2. Area of	(A) $\frac{1}{2}\pi r^2$						
		equilateral triangle	(B) $\frac{\sqrt{3}}{4} \times \text{side}^2$	(b) $1 \rightarrow B$ , $2 \rightarrow C$ , $3 \rightarrow F$ , $4 \rightarrow E$					
		3. Area of semicircle	(C) $\frac{\sqrt{3}}{\sin^2 (1-c)}$	(c) $1 \rightarrow D$ , $2 \rightarrow B$ , $3 \rightarrow A$ , $4 \rightarrow F$					
		4. Perimeter of	(B) $\frac{\sqrt{3}}{4} \times \text{side}^2$ (C) $\frac{\sqrt{3}}{2} \text{side}^2$ (D) $\frac{1}{4} \pi r^2$	(d) $1 \rightarrow D$ , $2 \rightarrow 1$	$3, 3 \rightarrow E, 4 \rightarrow F$				
		semicircle	$(E) \frac{-\pi r}{4}$						
			L (P) 1						