Student Name;----------	Roll No.....	Date...../...../.....
Class 2nd year	Subject : Mathematics	Chapter # 4
T- Marks : 30	Time : 40 mints	Obtain Marks

Q # 1	Circle the correct option	1x7=7					
1	The slope intercept form of equation of line is ;						
a	$l = \frac{x}{a} + \frac{y}{b}$	b	$y = mx + c$	c	$y = \frac{x}{m} + c$	d	$y - y_1 = m(x - x_1)$
2	Two lines l_1 amd l_2 with slope m_1 and m_2 are parallel if ;						
a	$m_1 = m_2$	b	$m_1 = -m_2$	c	$m_1 m_2 = -1$	d	$m_1 = \frac{1}{m_2}$
3	The line $y = 3x$ passes through ;						
a	origin	b	$(4,3)$	c	$(3,1)$	d	$(0,3)$
4	Distance between $(1,2)$ and $(2,1)$ is ;						
a	$\sqrt{3}$	b	$\sqrt{5}$	c	$\sqrt{2}$	d	7
5	The perpendicular distance of the line 12x+5y=7 from the origin is;						
a	$\frac{7}{13}$	b	$\frac{13}{7}$	c	$\frac{1}{3}$	d	13
6	Slope of the line 2x +y−3=0 is ;						
a	2	b	$\frac{2}{3}$	c	-2	d	$\frac{-2}{3}$
7	Midpoint of the of the line segment join $A(-8,3)$, $B(2,-1)$ is ;						
a	$(-6,2)$	b	$(10,4)$	c	$(-3,1)$	d	$(-16,-3)$

Q # 2	Write short answer of following question.	2x7=14
i	Convert the given equation into normal form $15y - 8x + 3 = 0$	
ii	Show that the points $A(3,1), B(-2,-3) and\ C(2,2)$ are vertices of an isosceles tringle.	
iii	Find an equation of line through $A(-6,5)$ and having slope 7.	
iv	Convert into two intercept form 2x−4y+11=0	
v	Find the point that divides the join of $A(-6,3)$ and $B(5,-2)$ in the ratio 2:3 internally.	
vi	Show that the the triangle with vertices $A(1,1), B(4,5)\ and\ C(12,-5)$ is right triangle.	
vii	By means of slopes show that points $A(-1,-3), B(1,2)$ and $C(2,9)$ are collinear ;	

Q # 3	Write detail answer of these questions.	4+5=9

a. Find the angles of triangle whose vertices are $A(-5,4)$, $B(-2,-1)$, $C(7,-5)$

b. Find the equation of two parallel lines, perpendicular to $2x - y + 3 = 0$, such that the product of x− and y− intercepts of each is 3 .