X- Mathematics Assignment No-01- Arithmetic Progression.

Q1. Write the first four terms of the sequence defined by $t_n = n(n+1)$

Q2. Write the first three terms of the sequence $a_n = (n^2 + 1)$

Q3. Write the 6th term from the sequence $t_n = \dfrac{1 + (-2)^n}{n-1}$

Q4. Write the 5th term from the sequence $a_n = \dfrac{(n+1)(n+2)}{n+3}$

Q5. Write and find the 5th term of an AP whose 1st term is 3 and Common difference is 5.

Q6. Find an A.P. whose nth term is $(2n+5)$

Q7. Find an AP whose general term is $\dfrac{3n-2}{2}$

Q8. The first term of an AP is 5 and Common difference is -3. Find 11th term of the A·P

Q9 Find the 12th term and general term of the A.P. 5, 8, 11, 14, ------

Q10 Which term of the AP 1, 6, 11, 16, ----- is 81

Q11. The 4th term of an A·P is 14 and its 8th term is 30. Find the first term and the Common difference.

Q12. Which term of the sequence 45, 41, 37, 33, --- is the 1st negative term ?

ANSWERS:-

(Q1) 2, 6, 12, 20	(Q6) 7, 9, 11	(Q10) 17th
(Q2) 2, 5, 10	(Q7) $\frac{1}{2}$, 2, $\frac{7}{2}$, ----	(Q11) $a=2$, $d=4$
(Q3) 13	(Q8) -25	(Q12) 13th is the 1st negative term.
(Q4) $\frac{21}{4}$	(Q9) $t_{12}=38$ $t_n=3n+2$	
(Q5) 23		