exceeds the 5^{th} term by 12.

Q.13 The sum of 5^{th} & 7^{th} term of an A.P is 52 and 10^{th} term is 46. Find the A.P (2)

Q.14 Which term of the A.P : 121, 117, 113, ---- is its first negative term.? (2)

Q.15 In an A.P the sum of first n terms is given by $S_n = 6n - n^2$. Find its 30^{th} term (2)

Q.16 How many terms of the A.P 65, 60, 55, ---- be taken so that their sum is zero. (3)

Q.17 If the p^{th} term of an A.P is $\frac{1}{q}$ and q^{th} term is $\frac{1}{p}$. Then show that its $(pq)^{th}$ term is 1. (3)

Q.18 The ratio of 11^{th} term to 17^{th} term of an A.P is 3:4. Find the ratio of 5^{th} term to 21^{st} term of the same A.P. Also find the sum of first 5 terms to that of 21^{st} term (4)

CLASS – 10th A

SUBJECT – Maths

CHAPTER – Arithmetic Progression

TIME :- 1 HOUR M.M : 30

Q.1 If n^{th} term of an A.P is $7n+4$. Then find common difference.

Q.2 Find 11th term from the end of the A.P : 10, 7, 4, ---, -62

Q.3 For what value of k the $k+9$, $2k-1$ & $2k+7$ are three consecutive terms of an A.P?

Q.4 What is the common difference of an A.P in which $a_{21} - a_7 = 84$

Q.5 Find the 9th term of the A.P $-15, -11, -7, \dots, 49$.

Q.6 The first term of an A.P is 5 and the last term is 45. If the sum of all the terms is 400, then find no. of terms.

Q.7 Find the sum of first 100 natural number.

Q.8 How many two digit number are divisible by 3.

Q.9 Assertion :- Common difference of an A.P whose nth term is given by $a_n = 4n - 70$ is 4.

Reason :- $d = a_n - a_{n-1}$

Q.10 Assertion :- Sum of first n terms of the A.P 3, 13, 23, --- is $5n^2 - 8n$

Reason :- The sum of first n terms of an A.P is given by $S_n = \frac{n}{2}[2a + (n-1)d]$ (10×1 = 10)

Q.11 Find the middle term of the A.P 6, 13, 20, ---, 216 (2)

Q.12 Determine the A.P whose third term is 16 and 7th term (2)