Arithmetic Progressions

General Term and Sum of n term in A.P Exercise

Q.1 Find :

(i) 10th term of the A.P. 1, 4, 7, 10,

(ii) 18th term of the A.P. $\sqrt{2}$, 3 $\sqrt{2}$, 5 $\sqrt{2}$,

(iii) nth term of the A.P. 13, 8, 3, -2,

Q.2 (i) Which term of the A.P. 3, 8, 13, is 248?

(ii) Which term of the A.P. 84, 80, 76, is 0?

(iii) Which term of the A.P. 4, 9, 14, is 254?

Q.3 (i) Is 68 a term of the A.P. 7, 10, 13,?

(ii) Is 302 a term of the A.P. 3, 8, 13,?

Q.4 (i) How many terms are there in the A.P.

7, 10, 13, 43 ?

(ii) How many terms are there in the A.P.

$$-1, -\frac{5}{6}, -\frac{2}{3}, -\frac{1}{2}, \dots, \frac{10}{3}$$
?

Q.5 The 10th and 18th terms of an A.P. are 41 and 73 respectively. Find 26th term.

- **Q.6** If 10 times the 10th term of an A.P. is equal to 15 times the 15th term, show that 25th term of the A.P. is zero.
- **Q.7** The 6th and 17th terms of an A.P. are 19 and 41 respectively, find the 40th term.
- **Q.8** Find the sum of all odd numbers between 100 and 200.
- **Q.9** Find the sum of all integers between 84 and 719, which are multiples of 5.
- **Q.10** Find the sum of all integers between 50 and 500 which are divisible by7.

ANSWER KEY

1.	(i) 28	(ii) 35√2	(iii) – 5n + 18
2.	(i) 50	(ii) 22	(iii) 51
3.	(i) No	(ii) No	
4.	(i) 13	(ii) 27	
5.	105		
7.	87		
8.	7500		
9.	50800		
10.	17696		