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(Affiliated to CBSE up to +2 Level)

CLASS: X

SUB.: MATHS (NCERT BASED)

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## MCQs

### Chapter 5 Arithmetic Progressions

1. If  $a, b, c, d, e$  are in A.P., then the value of  $a - 4b + 6c - 4d + e$  is

- (a) 0                      (b) 1                      (c) -1                      (d) 2

2.  $n^{\text{th}}$  term of the sequence  $a, a + d, a + 2d, \dots$  is

- (a)  $a + nd$                       (b)  $a - (n - 1)d$                       (c)  $a + (n - 1)d$                       (d)  $n + nd$

3. The 10th term from the end of the A.P.  $4, 9, 14, \dots, 254$  is

- (a) 209                      (b) 205                      (c) 214                      (d) 213

4. If  $2x, x + 10, 3x + 2$  are in A.P., then  $x$  is equal to

- (a) 0                      (b) 2                      (c) 4                      (d) 6

5. The sum of all odd integers between 2 and 100 divisible by 3 is

- (a) 17                      (b) 867                      (c) 876                      (d) 786

6. If the numbers  $a, b, c, d, e$  form an A.P., then the value of  $a - 4b + 6c - 4d + e$  is

- (a) 0                      (b) 1                      (c) -1                      (d) 2

7. If 7 times the 7<sup>th</sup> term of an A.P. is equal to 11 times its 11<sup>th</sup> term, then 18<sup>th</sup> term is

- (a) 18                      (b) 9                      (c) 77                      (d) 0

8. If  $p, q, r$  are in AP, then  $p^3 + r^3 - 8q^3$  is equal to

- (a)  $4pqr$                       (b)  $-6pqr$                       (c)  $2pqr$                       (d)  $8pqr$

9. In an AP, if  $a = 3.5, d = 0, n = 101$ , then  $a_n$  will be

- (a) 0                      (b) 3.5                      (c) 103.5                      (d) 104.5

10. In an AP, if  $d = -2, n = 5$  and  $a_n = 0$ , the value of  $a$  is

- (a) 10                      (b) 5                      (c) -8                      (d) 8