MULTIPLE CHOICE QUESTIONS

Choose and write the correct option in the following questions.

1. If the first three terms of an AP are $3p - 1$, $3p + 5$ and $5p + 1$ respectively, then the value of p is:
   (a) 2 (b) –3 (c) 4 (d) 5

2. The next (4th) term of the AP $\sqrt{18}$, $\sqrt{50}$, $\sqrt{98}$, ... is:
   (a) $\sqrt{128}$ (b) $\sqrt{140}$ (c) $\sqrt{162}$ (d) $\sqrt{200}$

3. The common difference of the AP whose nth term is given by $a_n = 3n + 7$, is:
   (a) 7 (b) 3 (c) 9 (d) 1

4. If the sum of first m terms of an AP is $2m^2 + 3m$, then its second term is:
   (a) 5 (b) 7 (c) 10 (d) 12

5. The first term of an AP is p and the common difference is q, then its 10th term is:
   (a) $q + 9p$ (b) $-9q$ (c) $p + 9q$ (d) $2p + 9q$

6. Which term of the AP, 21, 42, 63, 84, ... is 210?
   (a) 8th (b) 9th (c) 10th (d) 11th

7. Two APs have same common difference. The first term of one of these is –1 and that of the other is –8. Then the difference between their 4th term is
   (a) –1 (b) –8 (c) 7 (d) 9

8. The 21st term of the AP whose first two terms are –3 and 4, is:
   (a) 17 (b) 137 (c) 148 (d) –143

9. The first term of an AP is 5 and the last term is 45. If the sum of all the terms is 400, the number of terms is:
   (a) 20 (b) 8 (c) 10 (d) 16

10. The 11th and 13th term of an AP are 39 and 45, respectively. What is the common difference of the AP?
    (a) 42 (b) 21 (c) 6 (d) 3

11. The sum of first 16 terms of the AP 10, 6, 2, ... is:
    (a) –320 (b) 320 (c) –352 (d) –400

12. The 9th term from the end (towards first term) of the AP 7, 11, 15, 19, ..., 147 is:
    (a) 135 (b) 125 (c) 115 (d) 39