MULTIPLE CHOICE QUESTIONS FOR PRACTICE

SUBJECT: MATHEMATICS   UNIT: ARITHMETIC PROGRESSIONS   CLASS:10

STUDENT NAME:

SCHOOL NAME:

Four alternatives /choices are given for each incomplete statement or a question. Click the correct answer.

1. The n th term of an Arithmatic Progression is given by the formula

   A) $a_n = a + (n-1)d$ B) $a_n = a + (n+1)d$ C) $a_n = a + d$ D) $a_n = \frac{n(a+a_n)}{2}$

2. -1,-4,-7, ... The common difference of Arithmetic Progression is

   A) -5   B) 5   C) -3   D) 3

3. The n th term of Arithmatic Progression is given by a_n = 3n+1. Then its 3 rd term is

   A) 9   B) 10   C) 4   D) 28

4. If 1 ,x , 7 are in Arithmatic Progression then thye value of "x" is

   A) 4   B) 8   C) 6   D) 3

5. $a_n = 3n - 2$ is the n th term of Arithmatic Progression. Then its 5 rd term is

   A) 15   B) 6   C) 17   D) 13

6.The sum of first n terms of an Arithmatic Progression is given by the formula.

   A) $S_n = \frac{n}{2}(a + a_n)$ B) $S_n = \frac{n}{2}(a - a_n)$

   C) $S_n = n(a + a_n)$ D) $S_n = n(a - a_n)$

7. The sum of first 5 natural numbers is

   A) 10   B) 15   C) 20   D) 25

8. In an Arithmatic Progresson a=10 and d =1.Then 20 th term is

   A) 10   B) 19   C) 11   D) 29

9. 4,10,..........22   The 3rd term of this Arithmatic Progression is

   A) 6   B)16   C) 12   D) 26

10.The first term and common difference of the Arithmatic Progression -5,-1,3,7,............are.

   A)-5 and 4   B) -5 and -4   C) -5 and 6   D) -5 and -6

11. 2,7,12,....., The 10th term of this Arithmatic Progression is

   A) 12   B) 47   C) 52   D) 32.

12. 10,7,4,......The 30th term of this Arithmatic Progression is

   A) 97   B) 77   C) -77   D)-87

13.   2,_ , 26 are the term of Arithmatic Progression, Its middle term is

   A) 12   B) 14   C) -14   D) -16

14. a_n = 2n+3 is the n th term of Arithmatic Progression. Then a_3 =....

   A) 5   B) 8   C) 9   D) 10

15.   7,4,1.... Next term of this Arithmatic Progression is

   A) 3   B) -3   C) -2   D) 2

16. The sum of n terms of Arithmatic Progression is

   A) $S_n = \frac{n}{2}[2a + (n-1)d]$ B) $S_n = \frac{n}{2}[2a - (n-1)d]$

   C) $S_n = \frac{n}{2}[2a + (n+1)d]$ D) $S_n = \frac{n}{2}[a + (n-1)d]$

17. Which one of the following is not an Arithmetic Progression

    A) 1,3,9,27.   B) -5,-3, -1, 1   C) 2,6,10,14.   D)   1,4,7,10.

18. In an Arithmatic Progression a_3=9 and d= 3. Then a_2 =

    A) 3   B) 6   C) -3   D) -6.

19. In an Arithmatic Progression a=m and d=2m then a_5 =

    A) 5m   B) 8m   C) 9m   D)10m

20. $S_n = 3n + 1$ Then the common difference of Arithmetic Progression is

    A)-1   B) 3   C) 9   D) 10

21. Which one of the following is an Arithmatic Progression

    A) -5,-2, 2, 4.   B) 11,14,16,20   C) -1, 1, 3, 5   D) 3,6,12,24.

22. The sum of first 'n' natural numbers is

    A) $S_n = \frac{n(n-1)}{2}$ B) $S_n = \frac{n(n+1)}{2}$ C) $S_n = n(n + 1)$ D) $S_n = a + (n - 1)\, d$

23. The sum of first 20 odd numbers is

    A) 400   B) 200   C) 410   D) 555

24. The sum of first 20 natural numbers is

    A) 210   B)200   C)110   D)160

25. In 3 termed Arithmatic Progression, the middle term is 30. Then sumof end terms

    A) 50   B) 60   C) 70   D) 30

26. S_n =50, S_{n-1} = 42, then the value of a_n is

    A) 50   B) 42   C) 20   D) 8

27. The first term and common difference of the Arithmatic Progression -5, 1, 7, 13 ,………… are

    A) 5 and -4   B) -5 and -4   C) -5 and 6   D) -5 and -6

28. a_n =4n+5 is the n th term of Arithmatic Progression. Then its 3 rd term is

    A) 5   B) 9   C) 13   D) 17

29. If a_n = 4n+1 then first three terms of Arithmatic Progression are

    A) 5, 9, 13   B) 4, 5, 6   C) 4, 8, 12   D) 5, 8, 12

30. The .sum of first 20 term of the Arithmatic Progression   3, 5, 7, …………

    A) 220   B) 880   C) 440   D) 380

31. The first term is 26 and common difference is -7 ,Then the Arithmatic Progression is

    A) 26,19,13,7   B) 26,18,11,4   C) 26,19,12,5   D) 26,18,12,5

32. The sum of first n terms of an Arithmatic Progression is given by the formula

    A) $s_n = \frac{n}{2}(a + d)$ B) $s_n = \frac{n}{2}(a - l)$ C) $s_n = \frac{n}{2}(2a + l)$ D) $s_n = \frac{n}{2}(a + l)$

33. The sum of first 20 even numbers is

    A) 400   B) 200   C) 420   D) 555

34. -37, -33,-29 ---------- the common difference of this Arithmatic Progression is

    A) -33   B) 25   C) -30   D) 4

35. The sum of first 20 multiples of 5 is

    A) 100   B) 950   C) 1050   D) 1000