

CHAPTER:-5**ARITHMETIC PROGRESSION**

Q1.	The 10th term of the AP: 5, 8, 11, 14, ... is		
(A)	32	(B)	35
(C)	38	(D)	185
Q2.	In an AP, if $d = -4$, $n = 7$, $a_n = 4$, then a is		
(A)	6	(B)	7
(C)	20	(D)	28
Q3.	The list of numbers $-10, -6, -2, 2, \dots$ is		
(A)	An AP with $d = -16$	(B)	An AP with $d = 4$
(C)	An AP with $d = -4$	(D)	Not an AP
Q4.	The first four terms of an AP, whose first term is -2 and the common difference is -2 , are		
(A)	$-2, 0, 2, 4$	(B)	$-2, 4, -8, 16$
(C)	$-2, -4, -6, -8$	(D)	$-2, -4, -8, -16$
Q5.	If the 2nd term of an AP is 13 and the 5th term is 25, what is its 7th term?		
(A)	30	(B)	33
(C)	37	(D)	38
Q6.	If 7 times the 7th term of an AP is equal to 11 times its 11th term, then its 18th term will be		
(A)	0	(B)	1
(C)	2	(D)	3
Q7.	If the first term of an AP is -5 and the common difference is 2, then the sum of the first 6 terms is		
(A)	1	(B)	-1
(C)	0	(D)	2
Q8.	The sum of first 100 multiples of 3 is		
(A)	15130	(B)	15100
(C)	15120	(D)	15150
Q9.	In an AP if $a = -7.2$, $d = 3.6$, $a_n = 7.2$, then n is		
(A)	-5	(B)	5
(C)	4	(D)	7

Q10.	In an AP, if $a = 3.5$, $d = 0$, $n = 101$, then a_n will be		
(A)	3.5	(B)	5.5
(C)	4.5	(D)	6.5
Q11.	The 11th term of the AP: $-5, -5/2, 0, 5/2, \dots$ is		
(A)	-20	(B)	20
(C)	10	(D)	-10
Q12.	What is the common difference of an AP in which $a_{18} - a_{14} = 32$?		
(A)	-8	(B)	5
(C)	8	(D)	-5
Q13.	Two APs have the 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 terms is		
(A)	7	(B)	8
(C)	9	(D)	10
Q14.	The sum of last ten terms of the AP: $8, 10, 12, \dots, 126$ is		
(A)	1170	(B)	1250
(C)	1120	(D)	1130
Q15.	If 7 times the 7th term of an AP is equal to 11 times its 11th term, then its 18th term will be		
(A)	-1	(B)	0
(C)	2	(D)	1
Q16.	Find the sum of all the 11 terms of an AP whose middle most term is 30		
(A)	330	(B)	303
(C)	340	(D)	304
Q17.	In an AP if $a = 1$, $a_n = 20$ and $S_n = 399$, then n is		
(A)	9	(B)	23
(C)	38	(D)	52
Q18.	How many terms of the AP : $9, 17, 25, \dots$ must be taken to give a sum of 636?		
(A)	11	(B)	13
(C)	12	(D)	14
Q19.	The sum of the first 40 positive integers divisible by 6 is?		
(A)	4920	(B)	4209
(C)	4902	(D)	4290

Q20.	The sum of the odd numbers between 0 and 50 is?		
(A)	652	(B)	625
(C)	256	(D)	526
Q21.	If the sum of first 7 terms of an AP is 49 and that of 17 terms is 289, the sum of first N terms is?		
(A)	2N	(B)	3N
(C)	N^3	(D)	N^2
Q22.	In an AP, if $S_n = 3n^2 + 5n$ and $a_k = 164$, then the value of k is		
(A)	25	(B)	26
(C)	27	(D)	28
Q23.	Find the sum of first 17 terms of an AP whose 4 th and 9 th terms are –15 and –30 respectively		
(A)	501	(B)	105
(C)	115	(D)	510
Q24.	If sum of first 6 terms of an AP is 36 and that of the first 16 terms is 256, then the sum of first 10 terms will be?		
(A)	200	(B)	100
(C)	300	(D)	400
Q25.	The houses of a row are numbered consecutively from 1 to 49. If there is a value of x such that the sum of the numbers of the houses preceding the house numbered x is equal to the sum of the numbers of the houses following it. Then the value of x is?.		
(A)	25	(B)	40
(C)	35	(D)	55
Q26.	How many multiples of 4 lie between 10 and 250?		
(A)	70	(B)	50
(C)	65	(D)	60
Q27.	If the 3 rd and the 9 th terms of an AP are 4 and – 8 respectively, which term of this AP is zero?		
(A)	7 th	(B)	6 th
(C)	8 th	(D)	5 th
Q28.	Which term of the AP : 3, 15, 27, 39, . . . will be 132 more than its 54 th term?		
(A)	a_{65}	(B)	a_{67}
(C)	a_{66}	(D)	a_{56}

Q29.	If the numbers $n - 2$, $4n - 1$ and $5n + 2$ are in AP, then the value of n is		
(A)	3	(B)	4
(C)	1	(D)	2
Q30.	Which term of the AP: 53, 48, 43,... is the first negative term?		
(A)	T_{11}	(B)	T_{12}
(C)	T_{14}	(D)	T_{13}

ANSWERS

1	(A)	32	2	(D)	28	3	(B)	An AP with $d = 4$
4	(C)	$-2, -4, -6, -8$	5	(B)	33	6	(A)	0
7	(C)	0	8	(D)	15150	9	(B)	5
10	(A)	3.5	11	(B)	20	12	(C)	8
13	(A)	7	14	(A)	1170	15	(B)	0
16	(A)	330	17	(C)	38	18	(C)	12
19	(A)	4920	20	(B)	625	21	(D)	N^2
22	(C)	27	23	(D)	510	24	(B)	100
25	(C)	35	26	(D)	60	27	(D)	5^{th}
28	(A)	a_{65}	29	(C)	1	30	(B)	T_{12}