JSUNIL TUTORIAL, SAMASTIPUR PRACTICE · ASSIGNMENT - X ARITHMETIC PROGRESSION-2

Q. 21 How many terms of A.P. 22, 20, 18, should be taken so that their sum is zero?

Q. 22 Find the sum of odd positive integers less than 199.

Q. 23 How many two digits numbers between 3 and 102 are divisible by 6?

Q. 24 If 7 times the 7th term is equal to 11 times the 11*th* term of an A.P. Find its 18*th* term.

Q. 25 Which term of A.P. 13, 21, 29, will be 48 less than its 19th term?

Q. 26 Find the A.P. whose 3rd term is -13 and 6th term is +2.

Q. 27 Find the A.P., whose 5th term is 23 and 9th term is 43.

Q. 28 The angles of a triangle are in A.P. If the smallest angle is one fifth the sum of other two angles. Find the angles.

Q. 29 Aditi saved Rs. 500 in the first month of a year and then increased her monthly savings by Rs. 50. If in the *nth* month, her monthly savings become Rs 1000. Find the value of 'n'.

Q. 30 The sum of first n terms of an A.P. is $2n^2 + n$. Find *nth* term and common deference of the A.P.

Q. 31 The sum of 3*rd* and 7*th* terms of an A.P. is 14 and the sum of 5*th* and 9*th* terms is 34. Find the first term and common difference of the A.P.

Q. 32. Find the sum of the first 30 terms of an A.P., whose *nth* term is 2–3n. If *mth* and *nth* terms of an A.P. are 1/n and 1/m respectively, then find the sum of mn terms

Q. 33 If *mth*, *nth* and *rth* terms of an A.P. are x, y and z respectively, then prove that :m(y-z) + n(z-x) + r(x-y) = 0

Q. 34. If the roots of the equation $a(b - c) x^2 + b(c - a) x + c (a - b) = 0$ are equal, then show that 1/a , 1/b , 1/c are in A.P.

Q. 35. If the sum of m terms of an A.P. is n and the sum of n terms is m, then show that sum of (m + n) terms is -(m + n).

PRACTICE · ASSIGNMENT - X ARITHMETIC PROGRESSION