

INDIAN SCHOOL SOHAR
FORMATIVE ASSESSMENT – III
MATHEMATICS

Class: X

Date: 06/11/13

Time: 45 Mts

Marks: 25

General Instructions

1. All questions are compulsory.
2. The question paper consists of 10 questions divided into four sections A, B, C and D. Section A comprises of 3 questions of one mark each, section B comprises of 4 questions of 2 marks, section C comprises of 2 questions of 3 marks each, and section D comprises 2 questions of four marks each.

SECTION – A

1. The 17th term of an AP exceeds the 7th term by 35. Find the common difference of an AP
2. If the third term of an AP is 14 and the fifth term of an AP is 22, which term is 44 more than 75th term?
3. If 'p' and 'q' are the roots of the equation $x^2 + px - q = 0$, find the value of p and q

SECTION – B

4. Solve for 'x' $6a^2x^2 - 7abx - 3b^2 = 0$
5. The product of two consecutive odd numbers is 483. Find the numbers
6. If the 21st term of an AP is 25, find the sum of its 41 terms
7. Find the 10th term from the end of the AP 3, 5, 7,, 254

SECTION – C

8. For what value of 'p' the quadratic equation $2px^2 - 2(1+2p)x + (3+2p) = 0$ has two equal roots.
9. If the sum of first n terms of an AP is $n^2 + 3n$, find the value of the first and 20th term?

SECTION – D

10. 200 logs are stacked in the following manner: 20 logs in the bottom row, 19 in the next row, 18 in the row next to it and so on. In how many rows are the 200 logs placed and how many logs are in the top row?
11. A motor boat whose speed is 18 km/h in still water takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find the speed of the stream.