



TEST PAPER: MATHEMATICS

Time: 50 Minutes

Class: 10th I.C.S.E.

Max. Marks: 30 Marks

Date: 25th April, 2018

Marking Scheme: Three questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

Question 1:

- How many two-digit numbers are divisible by 3?
- How many terms of G.P. $3, 3^2, 3^3, \dots$ are needed to give the sum 120?
- In a flower bed, there are 23 rose plants in the first row, 21 in the second, 19 in the third, and so on. There are 5 rose plants in the last row. How many rows are there in the flower bed?

Question 2:

- Determine the AP whose 3rd term is 5 and the 7th term is 9.
- The 17th term of an AP exceeds its 10th term by 7. Find the common difference.
- A manufacturer of TV sets produced 600 sets in the third year and 700 sets in the seventh year. Assuming that the production increases uniformly by a fixed number every year, find :
 - the production in the 1st year
 - the production in the 10th year
 - the total production in first 7 years

Question 3:

- Insert 3 numbers between 3 and 27 such that the resulting sequence is an A.P.
- Find the 12th term of a G.P. whose 8th term is 192 and the common ratio is 2.
- The sum of first three terms of a G.P. is $13/12$ and their product is -1 . Find the common ratio and the terms.