INDIAN SCHOOL SOHAR FORMATIVE ASSESSMENT- 1 MATHEMATICS

Date: - 08-2015 Time: 40mnts
Class: X Marks: 20

General Instructions:

- All questions are compulsory.
- Section A comprises 3 questions of 1 mark each.
- Section B comprises 2 questions of 2 marks each.
- Section C comprises 3 questions of 3 marks each.
- Section D comprises 1 question of 4 marks.

SECTION A

- 1. The decimal expansion of $\frac{17}{400}$ will terminate after how many places of decimals?
- 2. Find the HCF of 510 and 92.
- 3. If α and β are the zeroes of $x^2 36$ then find the value of $\alpha^2 + \beta^2$.

SECTION B.

- 4. Explain why $5 \times 11 \times 17 + 17$ is a composite number
- 5. Find the LCM of 693,495 and 297.

SECTION C

- 6. If one zero of $p(x) = (a^2 + 4) x^2 + 13x + 4a$ is reciprocal of other, then find the value of a.
- 7. Find the zeroes of $4\sqrt{5}$ $x^2 + 17x + 3\sqrt{5}$ and verify the relation between the zeroes and coefficients of the polynomial
- 8. Prove that one and only one out of n, n+1 and n+2 is divisible by 3.

SECTION D

9. If α, β zeros of a quadratic polynomial $f(x) = ax^2 + bx + c$, then evaluate $\frac{1}{\alpha^3} + \frac{1}{\beta^3}$