## INDIAN SCHOOL SOHAR <br> FORMATIVE ASSESSMENT- 1 <br> MATHEMATICS

Date: - 08-2015
Time: 40 mnts
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 $\alpha$ and $\beta$ 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 693,495and 297.

## SECTION C

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

## SECTION D

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