Even Semester Lesson Plan

Subject : Mathematics

Teacher name: Pinki, Paper 1 Semester 2nd

April 2021

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| Divisibility, G.C.D.(greatest common divisors), L.C.M.(least common multiple) Primes, Fundamental Theorem of Arithemetic. Linear Congruences, Fermat’s theorem. Wilson’s theorem and its converse. Linear Diophanatine equations in two variables |

May 2021

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| Complete residue system and reduced residue system modulo m. Euler function Euler’s generalization of Fermat’s theorem. Chinese Remainder Theorem. Quadratic residues. Legendre symbols. Lemma of Gauss; Gauss reciprocity law. Greatest integer function [x]. The number of divisors and the sum of divisors of a natural number n (The functions d(n) and s (n)). Moebius function and Moebius inversion formula. |

June 2021

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| De Moivre’s Theorem and its Applications. Expansion of trigonometrical functions. Direct circular and hyperbolic functions and their properties. |

July 2021

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| Inverse circular and hyperbolic functions and their properties. Logarithm of a complex quantity. Gregory’s series. Summation of Trigonometry series |