Nepal Algebra Project(NAP)
Central Department of Mathematics
Tribhuvan University,Kirtipur, Kathmandu,Nepal
Fields and Galois Theory

Course Instructor: Prof. Kalyan Chakraborty

Summary of NAP: Module 5 - Lecture 6

- This final lecture was devoted to 'Galois Solvability Theorem'.
- Discussed the solvability of general cubic and quartic equations in terms of the Galois theory. Defined solvability by radicals in terms of radical extensions and gave examples.
- Proved the theorem which states that 'In a field of characteristic zero a polynomial is solvable iff its Galois group is solvable'.
- Concluded with an example of a 5-th degree polynomial showing that it is not solvable as its Galois group is not solvable.