

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

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Summary of NAP: Module 5 - Lecture 1

- Recalled ‘separable’ criterion with examples and also recalled the ‘Fundamental theorem of Galois theory’. Then motivated the ‘Primitive element theorem’ with an example and gave the proof of the theorem. Then I showed that if E is a separable, algebraic extension of F then there can be only finitely many intermediate fields. Also proved the converse of this result and in particular mentioned that in case of Galois this converse provides another proof of the ‘Primitive element theorem’.