Module MA3411: Examinable Material, Annual Examination 2014

February 18, 2014

1. Basic Principles of Group Theory

- This section is *non-examinable*. Nevertheless candidates should be familiar with the basic material described here.

2. Basic Principles of Ring Theory

- This section is *non-examinable*. Nevertheless candidates should be familiar with the basic material described here.

3. Polynomial Rings

- The *definitions* and *statements* of results in this section are *examinable*, and should be known. The proofs of those results are non-examinable.

4. Field Extensions

- All material in this section is *examinable*.

5. Ruler and Compass Constructions

- All material in this section is *non-examinable*.

6. Splitting Fields and the Galois Correspondence

- All material in this section is *examinable*.

7. Roots of Polynomials of Low Degree

- All material in this section is *examinable*. Nevertheless it should not be necessary or appropriate to commit to memory computations used to express coefficients of cubic and quartic equations in terms of the roots of those polynomials.

8. Some Results from Group Theory

- The *definitions* and *statements* of results in this section are *examinable*, and should be known. The proofs of those results are non-examinable.

9. Galois's Theorem concerning the Solvability of Polynomial Equations

- All material in this section is *examinable*.

Problems

Candidates should be prepared for questions involving non-bookwork material of the sort included in circulated problems (available from the module website) and on past examination papers.