Examination report – December 2012 series

2730-027 Advanced mathematics 2

Section 1 – Areas of good performance / Areas for development
Syllabus reference: 1.24, 1.25, 1.34. Some aspects of using Cramer's rule were attempted by some candidates. Determinant and inverse was well done. Syllabus reference: 1.18, 1.21. Calculations on complex numbers was very poorly attempted. Syllabus reference: 1.27, 1.28, 1.30, 1.34. Manipulation of matrices gained some marks for most candidates. Syllabus reference: 1.32, 1.33, 1.34, 1.40, 1.41, 1.42. Inverse Laplace transforms rather poorly attempted. Inverse of a matrix was very poorly attempted. Syllabus reference: 1.13, 1.17. Series very poorly attempted. Binomial series was poorly attempted. Syllabus reference: 1.1, 1.2, 1.10, 1.11. Little attempt to use Maclaurin's series. Some marks obtained for differentiation of product. Syllabus reference: 1.4, 1.5, 1.6. Very little idea of method for determining integrals. Simpson's rule was very poorly attempted. Syllabus reference: 1.38, 1.39, 1.40, 1.41, 1.45. Some attempt was made to determine Laplace transforms and inverse Laplace transform. Syllabus reference: 1.23. Some attempt was made with the partial fraction with linear factors. Syllabus reference: 1.43, 1.44, 1.45, 1.46. Solving a differential equation using Laplace transforms was very poorly attempted.