

MA3484, Annual Examination 2019 - Guidance for Candidates

Candidates are asked to attempt three out of four questions.

Unlike in previous years, no official guidance will be given as to the nature of individual questions.

Candidates are expected to be familiar with definitions occurring in Section 3. Candidates may be asked to solve transportation problems similar to those that have appeared on examination papers in recent years. The statements and proofs of the following results from Section 3 are *examinable*:—

Proposition 3.1

Lemma 3.2

Proposition 3.4

Proposition 3.5

Proposition 3.6

Proposition 3.7

Proposition 3.8

Corollary 3.9

Candidates are expected to be familiar with definitions occurring in Section 4. Candidates may be asked to solve linear programming problems presented in Dantzig standard form similar to those that have appeared on examination papers in recent years. The statements and proofs of the following results from Section 4 are *examinable*:—

Lemma 4.1

Theorem 4.2

Candidates are expected to be familiar with definitions occurring in Section 5. Candidates may be asked in particular to solve problems concerning weak duality, complementary slackness and strong duality such as to be found within the lecture notes. The statements and proofs of the following results from Section 5 are *examinable*:—

Theorem 5.2
Corollary 5.3
Theorem 5.4
Lemma 5.7 (result only, not proof)
Lemma 5.8 (result only, not proof)
Theorem 5.9
Lemma 5.10
Lemma 5.11
Proposition 5.13
Lemma 5.14
Corollary 5.15
Corollary 5.16
Proposition 5.17
Corollary 5.18
Proposition 5.19
Theorem 5.21