



Graduateship in Marketing - Stage 4

LOGISTICS MANAGEMENT

FRIDAY, AUGUST 15, 2008. TIME: 9.30 am - 12.30 pm

Please answer the question in Section A, and **ONE** question from each of Sections B, C and D.

(If more than the specified number of questions in Sections B, C and D are attempted, delete those questions you do not wish to have marked. Otherwise the examiner will mark the **FIRST** question in Sections B, C and D.)

Section A carries **40%** of the marks. All other questions carry equal marks.

Do **NOT** repeat questions in the answers, but show clearly the number of the question attempted on the appropriate page of the Answer Book.

(Note: Marks are awarded for the relevant use of contemporary Irish and or international examples of marketing practice)

SECTION A (40%)

1. Case: Rio Bravo Electricos – General Motors Corporation

- (a) Review the arguments for and against the proposal to centralise the lead preparation area at the Rio Bravo plant.
- (b) Analyse the cost argument.
- (c) Discuss the non-cost issues that affect the proposal.
- (d) Explain the implications of Vazquez's quantitative analysis.

SECTION B (20%)

2. Towards more efficient consumer response, ECR was launched in 1992.
 - (a) What are the four pillars of ECR?
 - (b) Explain CPFR Model.
3. How can organisations get anywhere close to achieving the perfect order on every occasion? Discuss the answer within Total Quality Management (TQM) framework.

P.T.O.

SECTION C (20%)

4. The daily demand for beer at the Brown Bottle Pub follows a normal distribution with a mean of 50 litres and a standard deviation of 15 litres. The lead time is 10 days. For a desired service level of 95%, find:
- (a) Order Point
 - (b) Safety Stock.
5. A town has budgeted €250,000 for the development of new rubbish disposal areas. Seven sites are available, whose projected capacities and development costs are given below. Which sites should the town develop?

Site	A	B	C	D	E	F	G
Capacity, <i>tons/wk</i>	20	17	15	15	10	8	5
Cost, €1 000	145	92	70	70	84	14	47

SECTION D (20%)

6. Molly Rigg's medical testing company wishes to assign a set of jobs to a set of machines. The following table provides the production data of each machine when performing the specific job:

Jobs	Machine			
	A	B	C	D
1	7	9	8	10
2	10	9	7	6
3	11	5	9	6
4	9	11	5	8

- (a) Determine the assignment of jobs to machines that will maximise total production.
- (b) What is the total production of your assignment?

7. Fusion Engineering Inc. is designing a new product for welding two different alloys. The company has limited time and resources to complete the project. The following activity information is available.

Activity	Immediate Predecessor (s)	Normal Time (Days)	Normal Cost (€)	Crash Cost/Day (€)	Crash Time (Days)
A	-	4	400	125	3
B	A	5	800	200	4
C	A	4	520	150	2
D	B	3	600	225	2
E	C	3	255	100	2
F	B, E	4	600	175	2

- (a) Draw the project network.
- (b) Find the critical path.
- (c) Find the project completion time and the corresponding cost.
- (d) What is the total cost, if the project deadline is 13 days?