

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

Semester I Examinations, 2003/2004
Front Page Template

Exam Code(s)	
Exam(s)	SECOND COMMERCE EXAMINATION SECOND CORPORATE LAW EXAMINATION SECOND B.Sc. IN INFORMATION TECHNOLOGY SECOND B.Sc. IN BUSINESS INFORMATION SYSTEMS
Module Code(s)	MG203
Module(s)	BUSINESS ORGANISATION AND MANAGEMENT
Paper No.	2
Repeat Paper	Special Paper
External Examiner(s)	Professor J. Winterton
Internal Examiner(s)	Professor R. Green Dr A McCarthy Mr. K. O'Toole

Instructions: Multiple Choice, use the Answer Sheet provided

NB: Make sure you fill your name and student number on the MCQ answer sheet. Fill in your student number followed by a zero.

Duration	2
No. of Answer books	
Requirements:	
Handout	
MCQ	x
Statistical Tables	
Graph Paper	
Log Graph Paper	
Other Material	
No. of Pages	6
Department(s)	Management

**OLLSCOIL NA hÉIREANN, GAILLIMH
NATIONAL UNIVERSITY OF IRELAND, GALWAY**

SEMESTER 1 EXAMINATIONS, 2003/04

**SECOND COMMERCE EXAMINATION
SECOND CORPORATE LAW EXAMINATION
SECOND B.Sc. IN INFORMATION TECHNOLOGY EXAM
SECOND B.Sc. IN BUSINESS INFORMATION SYSTEMS EXAM**

BUSINESS ORGANISATION AND MANAGEMENT (MG 203)

**Professor J. Winterton
Professor R. Green
Mr. K. O'Toole
Dr. A. McCarthy**

PAPER 2

Time allowed: **TWO** hours

Please answer **THREE** questions.

Answer **ONE** question from **SECTION A**.

In **SECTION B**, answer **QUESTION 4** and **ONE OTHER** question.

Students are requested to use **separate answer books for each question**.
For **Question 4, Multiple Choice**, use the **Answer Sheet** provided

Section A

- Q1. Discuss the factors that influence individual behaviour at work.
(34 marks)
- Q2. There are a number of motivation theories offered in the literature. From what you have studied in this course, discuss, analyse, and justify which are the two most valuable theories of motivation.
(34 marks)
- Q3. 'Is there a European industrial relations system, and if so what are its main features?'
(34 marks)

**please turn over
contd./**

Section B

Q4 (Compulsory - 32 marks)

Use the sheet provided to answer the following Multiple Choice Questions.

Correct answers attract 2 marks each, uncompleted answers yield 0 marks, and incorrect answers attract a penalty of 1 mark - subject to the fact that a student cannot score below zero in this question.

1. Productivity is defined as:
 - a. output over input
 - b. output minus input
 - c. exports minus imports
 - d. Gross Domestic Product
2. Which of the following is not a type of B2B transaction?
 - a. Electronic Storefront
 - b. Buyers auction
 - c. Portals
 - d. Sellers auction
3. The time required to complete a group of jobs is called:
 - a. flow time
 - b. cycle time
 - c. makespan
 - d. tardiness
4. The accurate order of the Deming Wheel is
 - a. plan, check, do, act
 - b. plan, do, check, act
 - c. check, plan, do, act
 - d. plan, check, act, do
5. Statistical techniques that use historical demand data over a period of time to predict future demand are
 - a. time-series methods
 - b. qualitative methods
 - c. regression methods
 - d. transportation methods
6. In a three station assembly line, a product spends 3 mins first at station A, followed by 5 mins at station B and finally 4 mins at station C. The efficiency of the assembly line is
 - a. 80%
 - b. 125%
 - c. 100%
 - d. 75%

7. Which closeness rating reflects the highest importance for two departments being close to each other?
 - a. A
 - b. E
 - c. I
 - d. U
8. The term "fishbone diagram" is also used for which of the following quality control techniques
 - a. Pareto analysis chart
 - b. flowchart
 - c. histogram
 - d. cause-and-effect diagram
9. The Japanese term for a foolproof device that prevents defects from occurring is
 - a. muda
 - b. kanban
 - c. jidoka
 - d. poka-yoke
10. A Level Production strategy:
 - a. implies changing workforce levels to meet demand
 - b. implies a constant production rate
 - c. implies having resources in place to meet peak demand
 - d. implies a fluctuating production rate
11. In a relationship diagram, which of the following would depict a conflict
 - a. A thin line
 - b. A short heavy line
 - c. Zigzag lines
 - d. A sphere
12. The control chart that uses the percentage of defective items in a sample as the sample statistic is
 - a. range chart
 - b. c chart
 - c. p chart
 - d. mean chart
13. A WBS breaks down a project into
 - a. Gantt charts
 - b. Forward and backward passes
 - c. Components, subcomponents, activities and tasks
 - d. Latest start and finish times
14. Kaizen is another term for:
 - a. continuous improvement
 - b. JIT
 - c. visual control
 - d. defect prevention

15. Competition within industry is more intense when
- a. Firms are relatively equal in size
 - b. When products and services are not standardised
 - c. When industry growth is steady
 - d. When workforce and incentive policies are surging
16. The use of the Block Diagramming technique is associated with
- a. Flexible manufacturing systems
 - b. Product layouts
 - c. Process layouts
 - d. Fixed location layouts

Q5

- i) State briefly what is meant by process capability? **3 Marks**
- ii) Name the three main elements associated with process capability? **3 Marks**

The net weight of the crisps in a bag, packaged by the Crisp Company, is designed to be 19.0 oz., with a tolerance of ± 1.5 oz. The packaging process results in bags with an average net weight of 20.0 oz and a standard deviation of 0.25 oz.

- iii) Calculate the process capability ratio, C_p , and hence determine if the above process is capable of producing within the design specifications all of the time.
(Hint: $C_p = \text{tolerance range}/\text{process range}$). **7 Marks**
- iv) Calculate the process capability index C_{pk} and hence determine if the above process is capable of producing within the design specifications all of the time.
(Hint: $C_{pk} = \min.[(\bar{x} - \text{lower spec.})/3\sigma, (\text{upper spec.} - \bar{x})/3\sigma]$) **7 Marks**
- v) Determine the percentage of the bags from the process that will fail to meet design specifications. (Assume that probabilities are 0.4773 and 0.4986 for z values of 2.0 and 3.0 respectively). **7 Marks**
- vi) A control chart is a graph that establishes the control limits of a process. State briefly the four conditions, related to the distribution of sample points on a chart, required for the process to be considered to be in control. **7 Marks**

Q6

- i) List the main advantages and goals of the product and process layouts? **4 Marks**
- ii) Describe briefly how product and process layouts differ with regard to type of process, product, demand, volume, equipment, workers, inventory, layout decision, workers and material handling. **10 Marks**
- iii) Describe briefly the advantages associated with cellular layouts. **10 Marks**
- iv) List five basic elements of JIT that are achieved through the application of the cellular layout? **5 Marks**
- v) List five key principles of TQM **5 Marks**