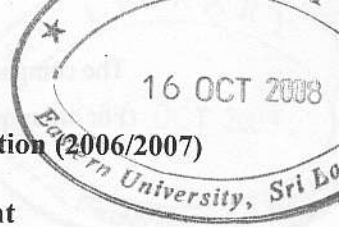


EASTERN UNIVERSITY, SRILANKA
Faculty of Commerce and Management
Final Year/First Semester Examination in Business Administration (2006/2007)
Proper/Repeat
MGT 4023 –Production and Quality Management



Answer all questions

Time: 03 hours

- Q1 a. *“Layout significantly influence the behaviour of people and their perception of the job, ultimately affecting job performance, motivation and satisfaction”.*

With the above view, identify and briefly explain the behavioral factors which may be important in making layout decision.

(06 marks)

- b. *“Maintenance is an inevitable activity in all types of turnover industries”. Do you agree this statement?*

Discuss the above statement in terms of breakdown maintenance.

(06 marks)

- c. Consider a manufacturing enterprise that is suffering from low material productivity, and advise the management how the material productivity could be improved.

(06 marks)

(Total 18 marks)

- Q2 a. *“Replacement policy in an organization is integrated with the maintenance policy”.*

Do you agree with this statement? Discuss your answer.

(06 marks)

- b. *“Product redesigning is important for maintaining the market share and business improvement”.*

Specify and discuss the related concepts in designing a product.

(06 marks)

- c. *“Purchasing is clearly an important area of managerial activity”.*

Identify and briefly explain the functions of purchasing department in making their purchasing effectively and efficiently.

(06 marks)

(Total 18 marks)

- Q3 A company uses a special kind of components in the manufacture of its products, which it orders from outside suppliers. The necessary data are given below :

Demand	- 200,000 Units per annum
Ordering cost	- Rs.200 per order
Carrying cost	- 20% of item price
Basic item price	- Rs. 100 per unit

The company is offered the following discounts on the basis

For order quantities

400 - 799 less 2%

800 - 1599 less 4%

1600 and over less 5%

You are required to establish the most economical quantity to order.

(12 marks)

Identify and briefly explain the main objectives for holding stocks.

(06 marks)

(Total 18 marks)

- Q4 a) A project team has been organized at Eastern University, Sri Lanka to design and develop a different system to presently launched local area network system in the new building area of the university. The project team knows that overtime and other means can be used to accelerate some of the activities. Towards preparing for these discussions, the team has prepared these cost-time schedules.

Activity	Preceding Activity	Normal duration (Weeks)	Crash Duration (Weeks)	Normal Cost (Rs)	Crash Cost (Rs)
A	-	3	2	3000	4000
B	A	3	3	300	300
C	A	7	5	4200	5800
D	A	9	7	7200	8100
E	B	5	4	2500	3000
F	D	0	0	0	0
G	C,E,F	6	4	3200	4100
H	G	4	3	4000	4700
I	G	13	10	7800	9000
J	H	10	9	10,000	12,000
K	H	10	8	11,000	13,000
L	I,J	9	7	8000	11,000

- a) Draw the network diagram and identify the critical path.

(04 marks)

- b) Calculate the minimum duration and associated cost.

(06 marks)

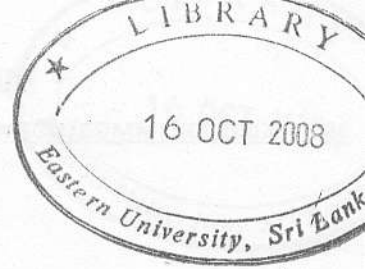
- c) Estimate the minimum cost and associated duration.

(08 marks)

(Total 18 marks)

Q5 a) Write short notes for the following

1. Quality control cycles
2. Just in Time
3. Pareto analysis
4. Total Quality Management
5. Job production
6. Material Requisition Planning



(6*3 = 18 marks)