



# UNIVERSITY OF RUHUNA

## Faculty of Engineering

End-Semester 5 Examination in Engineering: August 2015

**Module Number: IS5312(O/C)**

**Module Name: Industrial Management**

**[Three Hours]**

**[Answer all questions, each question carries Twelve marks]**

---

- Q1 a) Briefly explain the terms 'efficiency' and 'effectiveness'. [4 Marks]
- b) Briefly explain the four basic functions of management process. [4 Marks]
- c) The management is responsible and answerable to many groups. Select four groups and explain the responsibilities towards these groups [4 Marks]
- Q2 a) What do you mean by 'franchising'? [4 Marks]
- b) Explain the advantages and disadvantages of operating as a company. [4Marks]
- c) There are many businesses operating as sole traders in Sri Lanka. Briefly explain the reasons for this. [4Marks]
- Q3 a) "All companies require product development". Briefly discuss this statement. [4 Marks]
- b) What do you mean by 'Product Life Cycle'? Explain the different phases of product life cycle. [4 Marks]
- c) What do you mean by 'Intellectual Property Rights'? [4Marks]

- Q4 a) Briefly explain the four production methods in manufacturing. [4 Marks]
- b) What do you mean by 'Bills of Material'? [2 Marks]
- c) A Company makes telephone booths, for a stable market where the demand is 450 units per month. The booths are made in batches, with all the units in each batch being completed at the same time. Given the following information.
- Machine set-up cost per batch =Rs.150
- Stock holding cost =10% of stock value per annum
- Unit cost =Rs.37.50

Calculate the economic batch quantity.

[6 Marks]

Q5 Following table gives the activities, predecessors and duration for a project.

- a) Find the critical path activities for this project.

[8 Marks]

- b) Calculate the time duration of this project

[4 Marks]

Activity	Predecessor	Duration (days)
A	-	1
B	A	2
C	A	1
D	A	1
E	A	3
F	B	2
G	D	2
H	E	5
J	F	1
K	CFG	1
L	H	1
M	J	2

[12 Marks]