

# UNIVERSITY OF RUHUNA

## Faculty of Engineering

End-Semester 5 Examination in Engineering: July 2016

Module Number: IS5304

Module Name: Industrial Management

## [Three Hours]

[Answer all question, each question carries ten marks] [Use separate booklets for Section A and Section B]

#### Section A

Q1 a) Briefly explain the terms 'efficiency' and 'effectiveness'.

[2 Marks]

- b) Briefly explain the four basic functions of management process with examples. [4 Marks]
- c) What are the three main skills that an effective manager must possess? Are all these skills equally important? Discuss.

[2 Marks]

d) Briefly explain the management levels and their responsibilities.

[2 Marks]

Q2 a) All companies require paying attention on 'product development' in the current competitive business environment. Discuss this briefly.

[2 Marks]

b) What do you mean by 'Product Life Cycle'? Explain this term while explaining the different phases of product life cycle.

[4 Marks]

c) What do you mean by 'Intellectual Property Rights'? Explain briefly.

[4 Marks]

- Q3 a) Briefly explain the advantages and disadvantages of establishing sole traders. [3 Marks]
  - b) Explain the key elements of market research.

[2 Marks]

c) Explain the advantages and disadvantages of operating as a company. [2 Marks]

d) Sunil is a designed tailor and would like to go into business for himself, but he needs some money to get started. His parents want to help him get his feet on the ground and start his career. They agree to invest in his business; however, they don't want to be involved in any part of the business, they are just trying to help him out. Sunil asks your opinion on how to organize his business. The task is assigned to you. What business form would suit the needs of Sunil? Why? What are the advantages of this business form?

[3 Marks]

Q4. a) Briefly explain the key stages in project management.

[2 Marks]

b) What do you mean by 'critical path'?

[2 Marks]

c) Find the critical path and the project completion time for the following project.

[6 Marks]

Activity	Predecessor	Duration (days)
A	eag .	5
В		10
C		1
D	В	8
E	В	10
F	В	9
G	A, D	3
Н	A, D	7
J	F	4
I	F	3
K	C, J	5
L	H, E, <b>I</b> , K	8
M	C, J	4

#### Section B

- Q5. Briefly determine the legal consequences of the following situations. Your answer should be supported with relevant decided cases, if any.
  - (a) Ever Solution, a software company, is the owner of the 'Magic Engineering' software, which is very famous among engineers. Kamal, a software engineering student, made a copy of this software for his academic works, but later he made several copies and distributed among his batch mates for a nominal price.

[5 Marks]

(b) Fast Construction Engineers, handed over a load of time sensitive chemical mixture to Lazio Transporters to deliver it from Fast Construction Engineers' factory to one of their constructions site. Lazio Transporters were advised to deliver them within a certain time. However, owing to bad weather and some mechanical problems of the vehicle, it was impossible for Lazio Transporters to proceed beyond a certain point and to reach the destination as they planned. Since Lazio Transporters found that, the chemical mixture was becoming bad, they sold them to a nearest construction site similar to that of Fast Construction Engineers.

[5 Marks]

Q6. (a) Briefly describe the different types of tests that have been developed by the court to determine the nature of employment relationship.

[5 Marks]

(b) Briefly explain the various dispute resolution mechanisms available under the Industrial Disputes Act, No.43 of 1950.

[5 Marks]