



UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 5 Examination in Engineering: October 2019

Module Number: IS5304

Module Name: Industrial Management

[Three Hours]

[Answer all the questions, each question carries ten marks]

[Use separate booklets for Section A and Section B]

Section A

- Q1 a) Briefly explain the basic functions of management process with examples. [4 Marks]
- b) Briefly explain the terms 'efficiency' and 'effectiveness'. [2 Marks]
- c) What are the three main skills that an effective manager must possess? Describe them briefly. Are all these skills equally important? Discuss. [4 Marks]
- Q2 a) Briefly explain three (03) main management activities in the operational area. [3 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. [3 Marks]
- Q3 a) Explain the advantages and disadvantages of operating as a company [2 Marks]
- b) Briefly explain the key elements of market research. [2 Marks]

- c) Explain the main four activities in purchasing. [4 Marks]
- d) Explain two (02) major sources of potential job candidates while showing their advantages and disadvantages. [2 Marks]

Q4. Using the information in Table 1;

- a) Draw network diagram using Activity on Arrow (AoA) method. [6 Marks]
- b) Find the project completion time. [2 Marks]
- c) State the critical path. [2 Marks]

Table 1

Activity	Predecessor	Duration (days)
A	-	10
B	-	20
C	-	5
D	B	16
E	B	20
F	B	18
G	A, D	10
H	A, D	14
J	F	8
I	F	6
K	C, J	10
L	H, E, I, K	16
M	C, J	10

Section B

Q5. Very briefly determine the legal consequences of the following situations. Your answer should be supported with relevant decided cases if any.

- (a) Aruna entered into a contract with Ruwan to buy a grinding machine. Although both parties believed that the machine was a German one, unknown to both parties the machine was a Chinese one and not up to the expected standard.
- (b) Aruna and Ruwan agreed to construct a building within the next 18 months. However, due to lack of laborers in the area, they decided to recruit unemployed women in the area. Some of them are pregnant at the time of recruitment.
- (c) Aruna and Ruwan started a motor vehicle repairing garage. However, due to heavy demand, they decided to hand over some of the works for an agent. Now they came to know that the agent has earned some secret profit out his work.
- (d) Aruna and Ruwan developed a new mechanical device the help mechanics to find fuel pump defaults. Now they are planning to launch the product by naming 'SUSUKEY'.
- (e) Aruna and Ruwan decided to discharge the garbage of the garage to a water stream run nearby the garage.

[10 Marks]

Q6. Write brief notes on any four (04) of the following.

- (a) Public nuisance and private nuisance.
- (b) Ethical issues in engineering.
- (c) Illegality.
- (d) Various dispute resolution mechanisms are available under the Industrial Disputes Act, No.43 of 1950.
- (e) Duties of an Agent.

[10 Marks]