

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA****FINAL EXAMINATION
SEMESTER II
SESSION 2016/2017**

COURSE NAME : **ENGINEERING MANAGEMENT**
COURSE CODE : **BNR35203 / BNR42603**
PROGRAMME CODE : **BND/BNE/BNF**
EXAMINATION DATE : **JUNE 2017**
DURATION : **2 HOURS 30 MINUTES**
INSTRUCTION : **ANSWERS ALL QUESTIONS**

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

- Q1** (a) Differentiate planning, organizing, leading and controlling in the function of management. (8 marks)
- (b) Briefly explain why we need for engineers in management. (6 marks)
- (c) Gary, an engineering technologist graduate is appointed as a production line supervisor in a television manufacturing company. Discuss his tasks as the production line supervisor. (6 marks)
- Q2** (a) You are a CEO of a new company and required to plan and prepare for company's objectives. Discuss **FOUR (4)** criteria for planning the objectives. (8 marks)
- (b) State the **TWO (2)** advantages and disadvantages of wider span of control and narrow span of control organization. (6 marks)
- (c) Explain briefly the motivator factors for employee in an organization. (6 marks)
- Q3** (a) In order to provide quality for products and services, total quality management (TQM) is very important. Apply and explain **FIVE (5)** pillars of TQM to ensure the good quality of the products and services. (10 marks)
- (b) Assume that you are a quality department manager for a company and required to implement quality management and continuous improvement process in a production line. One of the elements for continuous improvement is PDCA. Discuss processes involved in PDCA cycle and draw suitable diagram. (10 marks)

- Q4** (a) Define the meaning of project. (3 marks)
- (b) James is a project manager for construction company. He needs to plan and build a factory for bicycle manufacturing company. Develop and breakdown suitable plan for James to start his project. (6 marks)
- (c) A project consists of eleven activities, A to K. The duration (in days), and the activities preceding each of them show in **Table Q4**.
- (i) Construct an activity network diagram for the project. The early start, late start, early finish and late finish for each activity must be stated.
- (ii) Find the critical path in this activity network.
- (iii) Calculate the duration of completion time of the project (11 marks)
- Q5** (a) Marketing is an important element in producing products and providing services. Explain briefly the **FOUR (4) P's** in marketing (8 marks)
- (b) Explain differences between breakdown maintenance and scheduled maintenance. (6 marks)
- (c) In order to monitor occupational safety and health issues, risk assessment is very important. One of tools for risk assessment is HIRARC. Discuss steps to be done in HIRARC. (6 marks)

- END OF QUESTIONS -

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Table Q4

Preceding Activities	Activities	Duration (Days)
C, F, J	A	7
E	B	6
-	C	9
B, H	D	7
C, J	E	3
-	F	8
A, I	G	4
J	H	9
E, F	I	9
-	J	7
B, H, I	K	5