

**UNIVERSITI KUALA LUMPUR
MALAYSIAN INSTITUTE OF INDUSTRIAL TECHNOLOGY**

**FINAL EXAMINATION
JANUARY 2016 SEMESTER**

COURSE CODE : JQD 20503
COURSE TITLE : QUALITY SYSTEM
PROGRAMME LEVEL : DIPLOMA
DATE : 19 MAY 2016
TIME : 2.30 PM – 5.30 PM
DURATION : 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
 2. This question paper is printed on both sides of the paper.
 3. This question paper consists of TWO (2) sections.
 4. Answer ALL questions for Section A. Choose TWO (2) questions in section B.
 5. Please write your answers on the answer booklet provided.
 6. Please answer all questions in English only.
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THERE ARE 6 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total : 60 marks)**INSTRUCTION : Answer ALL questions.****Please use the answer booklet provided.****Question 1**

Figure 1 : Product of Stark Industry Chemicals (SiC)

3M Cotch is the trademark name of a United States-made water-displacing spray. It was developed in 1953 by M. Stark, founder of the Stark Industry Chemicals (SiC), San Diego, California. It was originally designed to repel water and prevent corrosion, and later was found to have numerous household uses. Since the internal process of SiC and the product produced by them directly gave some impact to the environment, the management of SiC decided to embark on environment management system. As a quality engineer in SiC :

- (a) Explain the model of ISO 14001 to SiC management. You may elaborate by the aids of diagram.

(10 marks)

- (b) Illustrate the diagram for SiC management that shows the planning stage for EMS.

(5 marks)

- (c) Identify the activities, ASPECTS and IMPACTS of each area :

- i. SiC's Production Department
- ii. SiC's Human Purchasing Department

(5 marks)

Question 2

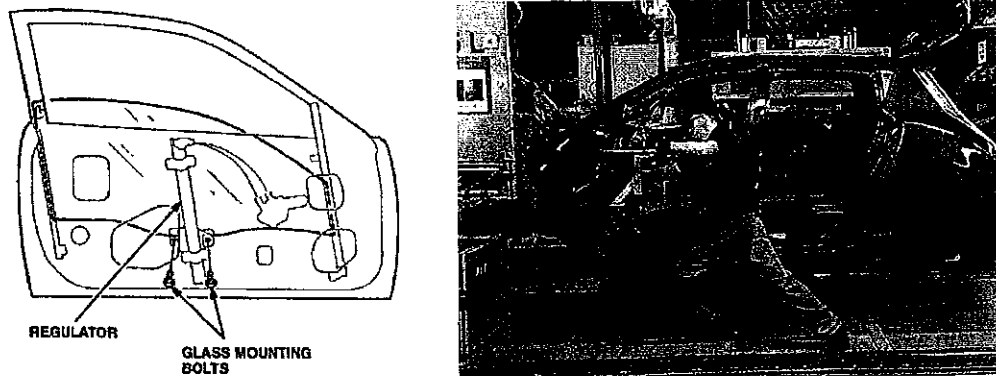


Figure 2 : KP power window products

Kampung Pisang (KP) produces 1000 parts of power window a month for a car maker in Pekan Industrial Estate, Pahang. There are a few processes involve in transforming the input required by KP into the end product which will be used in the assembly line of the car maker. To ensure all elements in each process will be properly manage, KP need to develop a proper quality systems in their organization. As a quality expert, helps KP to :

- (a) Describe the definition of ISO 9001:2015 standards. (2 marks)
- (b) Differentiate between "Quality System" and "Quality Management System" (6 marks)
- (c) List **EIGHT (8)** steps in ISO 9001:2008 application for certification process. (12 marks)

Question 3



Figure 3 : Nasi Minyak Catering

Nasi Minyak Catering is providing catering services through 3 branches located at Johor Bahru, Seremban and Kuala Lumpur. As to improve their services and increase customer satisfaction at all branches, Bobo, the owner and the managing director for Nasi Minyak Catering plan to embarked to quality management system in his organization. As an expert in quality system, helps Bobo by :

- (a) Discuss all **SIX (6)** quality dimensions that related to Nasi Minyak Catering business. (12 marks)
- (b) Explain to Bobo the steps that should be used to develop a quality management system. (8 marks)

SECTION B (Total : 40 marks)

INSTRUCTION : Answer TWO (2) questions ONLY

Please use the answer booklet provided.

Question 1



Figure 4 : HSi Logo and Buildings

HOSPITAL SULTAN ISMAIL (HSi) is a specialist tertiary hospital equipped with a fully computerized system known as Total Hospital Information System or THIS. HSi hospital was commissioned on 29 September 2007 and is operating at a land area of 28.33 hectares.

HSi is now in the mist of implementing QMS in their organization to ensure their organization will always **Standardize, Consistent and Effective** in their operation for the benefits of patient.

Refer to Figure 4 above and answer below questions :

- (a) Suggest and explain to HSi, **FIVE (5)** quality dimensions which related to their business.
(5 marks)
- (b) Assist HSi to identify **TWO (2)** suitable departments / function to maintain the sophisticated and world class equipment available in the hospital and discuss related processes for each department identified.
(5 marks)
- (c) By using the aids of an appropriate diagram, explain and relates the processes you identified above with the Quality Management Cycles for HSi. You must also relate your answer with the needs of HSBAS to always **Standardizes, Consistent and Effective**.
(10 marks)

Question 2



Figure 5: OHSAS 18001 Logo

There are two occupational safety and health management system standards, OHSAS 18001 Occupational Health & Safety Management System Standard and MS1722:2003 Management System Standard. These standards are based on quality management principle of PDCA continual improvement.

- (a) Occupational Health and Safety management system (OSH-MS) requires the organization to establish and implement various critical activities. Elaborate these activities in PDCA cycle and provide examples for each PDCA elements.

(15 marks)

- (b) Identify any **FIVE (5)** Principles of Incident Prevention that organization should practice in Occupational Health & Safety program

(5 marks)

Question 3

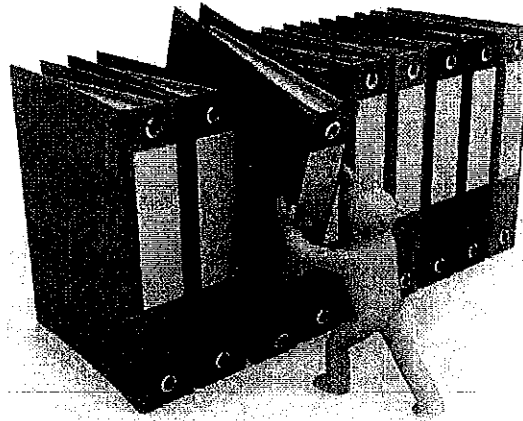


Figure 6 : Symbolic of Documentation Searching Process

- (a) By understanding the guidelines in Section 4.2.1 of ISO 9001:2008, Determine **TWO (2)** functions of the developed documented QMS
- (4 marks)
- (b) Illustrate the **FOUR (4)** level of documentation structure in Quality Management System (QMS). Explain the diagram and its level of documentation.

(16 marks)

END OF EXAMINATION PAPER

