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# UNIVERSITI SAINS MALAYSIA

First Semester Examination  
Academic Session 2009/2010

November 2009

## EBB 513/3 - Quality Management

Duration : 3 hours

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Please ensure that this examination paper contains FIVE printed pages before you begin the examination.

This paper consists of SEVEN questions.

**Instruction:** Answer **FIVE** questions. If candidate answers more than five questions only the first five questions answered in the answer script would be examined.

The answers to all questions must start on a new page.

All questions must be answered in English.

1. Problem solving and decision making are fundamental to total quality management. On the one hand good decisions will decrease the number of problems that occur. On the other hand, the workplace will never be completely problem-free.

Explain about the importance of problem solving and decision making based on the following points:

- (i) Learning to solve problems effectively, positively, and in ways that don't create additional problems.
- (ii) Becoming better decision makers.
- (iii) Learning to make decisions and handle problems in ways that promote quality.

(100 marks)

2. Mr. Thomas Burnly, CEO of a mid-sized fast food manufacturing firm, decided more than a year ago to get his employees involved, as a way to improve work and enhance his company's competitiveness. He called his managers and supervisors together, explained his idea, and had suggestion boxes placed in all departments. At first, the suggestion boxes filled to overflowing. Supervisors emptied them once a week, acted on any suggestions they thought had merit, and discarded the rest. After a couple of months, employee suggestions dwindled down to one or two a month. Worse, recent suggestion forms have contained derisive remarks about the company and its suggestion system. Productivity has not improved, and morale is worse than before. Mr. Burnly is at a loss over what to do. Employee involvement was supposed to help, not hurt.

Discuss the reasons why Mr. Burnly failed to empower his employees?

(100 marks)

3. As defined by the International Organization for Standardization (ISO): "TQM is a management approach for an organization, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organization and to society". TQM is the way of managing for the future, and is far wider in its application than just assuring product or service quality - it is a way of managing people and business processes to ensure complete customer satisfaction at every stage, internally and externally. TQM, combined with effective leadership, results in an organisation doing the right things right, first time.

The core of TQM is the customer-supplier interfaces, both externally and internally, and at each interface lie a number of processes. This core must be surrounded by commitment to quality, communication of the quality message, and recognition of the need to change the culture of the organisation to create total quality.

It is more convenience to express the above statement in a simple TQM Model. Discuss in detail about a possible TQM Model.

(100 marks)

4. Strategic planning is the process whereby organizations develop their vision, mission, guiding principles, broad objectives and specific strategies for achieving the broad objectives.

Strategic planning is an organization's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy, including its capital and people.

Various business analysis techniques can be used in strategic planning, including

- SWOT analysis
- PEST analysis
- STEER analysis
- STEEPLE

Discuss in detail any of these analysis technique to develop your company's strategic planning.

(100 marks)

5. Dr. Kaoru Ishikawa wrote that the use of statistical method as the seven indispensable tools that are being widely used by everyone: company presidents, company directors, middle management, foremen, and line workers. These tools are also used in a variety of departments, not only in the manufacturing department but also in the departments of planning, design, marketing, purchasing, and technology. Therefore, no matter where you fit into your organization today, you can use some or all of these tools to advantage, and they will serve you well for your future prospects. Their use will assure better decision making, better solutions to problems, and even improvement of productivity and products and services.

Explain about the most widely used total quality tools and their applications, and also provides some insights on the involvement of management and the cross-functional nature of the tools.

(100 marks)

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6. Benchmarking is becoming an increasingly popular tool among companies trying to become more competitive, striving for world-class performance. The vast majority of them are actively engaged in benchmarking. Benchmarking is a part of the total quality process, and anyone involved in the total quality should have a solid understanding of this subject. Discuss about your understanding on benchmarking, its benefits and its pitfalls.

(100 marks)

7. Just-in-time (JIT) is the name given to the Toyota Production System developed by Taiichi Ono. JIT manufacturing has become a management philosophy that seeks to eliminate all forms of waste in manufacturing processes and their support activities. JIT permits the production of only what is needed, when it is needed, and only in the quantity needed. This has to apply not only to JIT manufacturer but also to its suppliers if the system is to eliminate all possible waste. Those companies that have required their suppliers to do their warehousing clearly have not gotten the point. The supplier should not produce the material until the JIT manufacturer needs it. In that mode there is no warehousing and therefore no wasted resources for buildings, maintenance, people to care for the material, spoilage, obsolescence, or other related problems. Therefore, JIT is not so much related to supplier activities, although they are important, but more to events on the manufacturing floor. Explain with suitable example on how JIT being implemented.

(100 marks)