



The Open University of Sri Lanka

Commonwealth Executive Master of Business/Public Administration Programme

Final Examination July 2017

MCP1654 Quality Assurance Management

Duration Three (3) Hours

Date: 20th July, 2017

Time: 9.30 am to 12.30 pm

Instructions:

- Answer Question 1 (compulsory question) and any 4 questions from the others.
 - Your answers should be methodical and clear.
 - This question paper consists of 7 questions and has 3 pages.
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Q1.

Read the following case on ABC Springs Ltd. and attempt the questions given at the end.

ABC Springs Ltd

ABC Springs Ltd is a family own company founded in 1970 by the father of the current chairman, and employs 100 people. The company manufactures springs, wire forms and light pressings as a sub- or sub-sub-contractor to customers' specifications; there are no standard products. ABC Springs Ltd trades with a wide range of industries, from the computer and electronic sectors to lighting manufacturers and general engineering companies. It has become the sole supplier of springs to several well-known companies.

Orders involve quantities ranging from a "one-off" to millions, working to all levels of precision and to a variety of delivery scheduling systems, as dictated by the customers. This makes long- and even medium-term predictions of the company's developments difficult because the company works on an average of a maximum 3-week cycle from receipt of order to dispatch of goods. Delivery requirements by the customer are often based on very short notice being given, and the normally quoted lead time of four weeks can sometimes need to be reduced to a matter of hours to meet the customers' requirements! ABC Springs is highly regarded by its customers for its professionalism, knowledge and expertise in spring design and for providing a high quality personal service.

With the intention of improving the quality of products and to provide faster customer service the current Chairman has decided to abolish the existing bonus system and to introduce the new system introduced in which all employees were placed within a number of clearly defined job responsibilities. Every 6 months merit assessment reviews were held between the employee and their team leader to agree on their merit ratings for skills, attitude, attendance, performance, etc. This assessment accounted for up to 30% of their total remuneration. Even though the idea seems to be very practical the Chairman was not aware about the best method that can be used to implement this new idea. The Chairman convened a management meeting and explained his idea and requested the views of the managers to implement this idea. One Manager said the best approach is to use the Total Quality Management (TQM) approach and explained it in detail to the Management staff members. Chairman was really impressed and approved the suggestion.

Questions

- a) Explain the methodology that can be used to bring in TQM approach to ABC Springs Ltd. (10 marks)
- b) How do you ensure that the Chairman idea is properly taken care in building a TQM system within the ABC Springs Ltd? Explain. (10 marks)
- c) Explain what challenges you may face and your strategies to overcome such challenges. (08 marks)

Q2

- a) Explain the meaning of ISO 9001. (06 marks)
- b) Explain why do you think that a company should follow an ISO 9001 based Quality Management System. (06 marks)
- c) A manufacturing company is certified to ISO 9001 standard. Does that mean this company produces 100% perfect products to customers? Explain your views with justifications. (06 marks)

Q3

- a) Explain the concept and practices of Total Quality Management (TQM). (06 marks)
- b) Describe the Deming's approach for TQM. (06 marks)
- c) If an organization wants to proceed in developing a TQM system, they can consider Sri Lanka "National Quality Award", as a model and can be used to achieve that goal. In that model one of the important requirements is "Leadership". Explain why, "Leadership" is important in a TQM environment. (06 marks)

Q4

- a) Explain “Six Sigma” in relation to quality assurance. (06 marks)
- b) If a company is engaged in designing of products and intends to use “six sigma” as an approach for improvement, explain the steps of “six sigma” that has to be considered for this project. (06 marks)
- c) Differentiate between “Continuous Improvement” and “Continual Improvement”. (06 marks)

Q5

- a) Describe “seven basic tools” in quality assurance. (06 marks)
- b) Knowledge of *Seven Basic Tools* is essential for *Quality Improvement*. Do you agree? Give reasons for your answer. (07 marks)
- c) For what purpose can a quality manager use the tool of “Cause and Effect diagram”? Explain using an example. (05 marks)

Q6

- a) Describe ‘costs of Quality’. (06 marks)
- b) Explain different categories pertaining to costs of quality. (06 marks)
- c) Explain how “Appraisal Cost” can help to reduce “Failure Cost” within an organization. (06 marks)

Q7

- a) Describe what is meant by “Lean Manufacturing”. (06 marks)
- b) Explain the main focus that need to be addressed in implementing “Lean” concept in an organization. (06 marks)
- c) “ ‘Lean manufacturing’ is a part of TQM approach”. Do you agree with this statement? Justify. (06 marks)

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