

Chapter 33: Worksheet mark scheme (24 marks, HL 24 + 8)

- 1 Mark the following statements as **true** or **false**. (8)
- A quality product has to be made with the highest-quality materials. **False.**
 - A quality product is expensive. **False.**
 - A quality product meets consumer expectations. **True.**
 - A quality product goes beyond consumer expectations. **False.**
 - A quality product has to have a zero failure rate. **False.**
 - A cheap product can be of good quality. **True.**
 - Quality is a relative concept, not an absolute concept. **True.**
 - A quality product is fit for its purpose. **True.**
- 2 What is the problem with measuring quality of services? (1)
- Many of the criteria for measuring services are subjective and are therefore difficult to compare accurately.
- 3 Explain fully **three** of the problems associated with inspecting for quality. (3)
- Inspectors are 'successful' when they find faults, so workers tend to think they are just there to find problems with their work and they resent this or regard it as a challenge to get faulty things passed by the inspectors.
 - It is a boring job leading to demotivation and then fall in effectiveness.
 - If products are checked only at certain points in the production process, costly work can be wasted and it is hard to find where the problem originated.
 - Workers may no longer see themselves as responsible for quality. This may be demotivating and may result in lower-quality output.
- 4 What is the difference between quality control and quality assurance? (2)
- Quality control means checking quality at various points during production, whereas quality assurance sets agreed levels of quality to be reached at various stages in the manufacturing process, from design to sourcing supplies to delivery to the final consumer.
- 5 List **three** areas of attention necessary for quality assurance. (3)
- quality of raw materials
 - design of products likely to be produced with fewer faults
 - workers have to 'buy in' to minimum quality standards
 - TQM
 - quality of contact with customers
- 6 List **two** advantages of quality assurance. (2)
- everyone is responsible for quality – a form of job enrichment
 - self-checking can be motivating
 - reduces need for expensive final inspection or reworking of faulty products
 - system can be used to trace where problems originated



- 7 What is ISO 9000? (2)
It is the internationally recognised certificate that acknowledges the existence of a quality assurance procedure that meets certain conditions.
- 8 How does TQM relate to lean production? (3)
Lean production is the production of goods and services with the minimum levels of waste possible, while maintaining high standards. TQM is the involvement of all employees in the quality improvement process, including the improvement of efficiency and reduction of waste. It is a philosophy of every worker being empowered and responsible for the quality of their work. TQM is thus a key component of lean production.
- 9 (HL) What does the Japanese term 'Kaizen' mean? (1)
Continuous improvement.
- 10 (HL) Kaizen relies on **two** basic assumptions. What are they? (2)
- Workers who do a job every day may know how to improve a process better than managers.
 - Big improvements in efficiency or productivity need not always be the result of big capital investment. They can be the result of lots of tiny improvements added together.
- 11 (HL) List **three** limitations of Kaizen. (3)
- Some changes may still be big and expensive to carry out.
 - Managers may resist the idea that workers may know better than they do.
 - The Kaizen process takes time and therefore costs money.
 - Kaizen improvements are often minimal after a certain time.
- 12 (HL) What is benchmarking? (2)
It is the comparison of performance, including quality, of a business with performance standards throughout the industry.