



**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**DEPARTMENT OF APPLIED CHEMISTRY**  
**SUPPLEMENTARY EXAMINATIONS – JULY 2005**  
**QUALITY ASSURANCE MANAGEMENT & CONTROL – SCH 4111**  
**QUALITY ASSURANCE MANAGEMENT & CONTROL – SCH 2211**  
**TIME: 3 HOURS**

**INSTRUCTIONS TO CANDIDATES**

Answer **ANY FIVE (5)** questions from the SIX (6) provided. Each question carries 20 marks.

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1.
    - (a) Explain the dimensions of quality. (8 marks)
    - (b) How does a company accredited to ISO 9000 handle product non-conformance? (8 marks)
    - (c) What are appraisal costs in quality control? (4 marks)
  
  2. Discuss the following:
    - (a) The difference between Quality Control and Quality Assurance. (4 marks)
    - (b) Total Quality Costs. (6 marks)
    - (c) 100% Inspection. (5 marks)
    - (d) Quality versus reliability. (5 marks)
  
  3. You have been appointed Quality Assurance Manager of a small chemical company. You are shocked at the apparent disregard for procedures which have been laid down in the production department. This is particularly noticeable amongst the younger and newer members of the workforce.  

Outline your responsibility as regards quality in the production department and describe how you would proceed to improve the situation. (20 marks)
  
  4. Describe how ISO 9000 Quality Management System can be built in a Total Quality Management (TQM) implementation programme. (20 marks)
  
  5.
    - (a) Describe how Quality Control Circles can be introduced in an organization. (10 marks)
    - (b) How do you think the empowerment of the employees can enhance the performance of Quality Control Circles in the organization? (10 marks)

6. A supplier delivers light bulb to one of his customers in lots of 400 units. Both agree on an Acceptance Quality Level (AQL) of 1,5%.

- (a) Use the single sampling plan and normal inspection to determine which ones to accept and which ones to reject. (10 marks)
- (b) Why is knowledge of acceptance sampling important to purchasing? (5 marks)
- (c) What are the risks associated with sampling? (5 marks)

*End of question Paper!!!*