

**National Exams May 2011**  
**98-CS-3-Management Concepts for Engineers**  
**3 hours duration**

**Notes:**

1. If doubt exists as to the interpretation of any question, the candidate is urged to submit with the answer paper, a clear statement of any assumptions made.
2. This is a Closed Book exam. No calculators are allowed for this exam.
3. Any five questions constitute a complete paper. Only the first five questions as they appear in your answer book will be marked.
4. All questions are of equal value.
5. Write your answers in point-form whenever possible, but fully.

**Marking Scheme (marks)**

1. (i) 6, (ii) 7, (iii) 7
2. (i) 6, (ii) 7, (iii) 7
3. (i) 7, (ii) 6, (iii) 7
4. (i) 7, (ii) 7, (iii) 6
5. (i) 6, (ii) 7, (iii) 7
6. (i) 6, (ii) 7, (iii) 7
7. (i) 5, (ii) 5, (iii) 5, (iv) 5

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**98-CS-3, Management Concepts for Engineers**

1. (i) During negotiations, each side (management and union) employs various tactics to further its strategy. What tactics are commonly followed by union and management?  
(ii) Discuss the areas in which unions, managements and governments can cooperate to develop a long-term program for the benefit of all concerned.  
(ii) What is your understanding of the most difficult issues facing labour and management today?
2. (i) Explain the manner by which team work between and among managers and employees can be promoted in an organization.  
(ii) Douglas McGregor observed that managers had two different attitudes that led to entirely different management styles. Discuss the assumptions of people made by McGregor in Theory X and Theory Y.  
(iii) Explain the concept of Skinner's reinforcement theory of motivation with particular reference to the use of positive and negative reinforcement to motivate employee behaviour.
3. (i) Explain the concepts of mass marketing, adversarial marketing and relationship marketing.  
(ii) What are the job characteristics that influence motivation and performance? Name the two forms of job enrichment strategies that increase motivation.  
(iii) What are the basic differences between Frederick Taylor's scientific management and Elton Mayo's motivation theory (generated by the Hawthorne studies)?
4. (i) Explain the concepts of (a) synthetic system and (b) analytic system in the context of process manufacturing. Give examples of each.  
(ii) Explain the manner by which computer-integrated manufacturing can be introduced in small businesses or companies with limited resources.  
(iii) What is mass customization?
5. (i) State your understanding of financial control and its importance in financial management of a company.  
(ii) Explain the different types of bonds available in the market.  
(iii) What is a preferred stock? Describe the features of preferred stock.
6. (i) Explain the concept of job simulation, as a fast growing means of training. Give examples.  
(ii) There are many laws that affect human resource planning. What areas do these laws cover?  
(iii) What is performance appraisal? What are the steps followed in the performance appraisal process?

7. The 3M Company is often used as a great example of a company that encourages creativity. Its policy dictates that 30 percent of annual sales come from products less than four years old. But 3M wasn't always that progressive. Answer the following questions:
- (i) Do large companies find it difficult to innovate because they resist change? Is it because they are big or because they are afraid of the unknown? Why is that?
  - (ii) Do smaller companies do better at innovation because they are not so risk averse? Is that because most of them are private companies and not so accountable to outside shareholders?
  - (iii) Can you see any connection between innovation and continuous improvement (CI)? Does CI require innovation?
  - (iv) If you were vice-president in charge of production at a big company, how would you encourage innovation?