

National Exams December 2010
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) 7, (ii) 7, (iii) 6
6. (i) 7, (ii) 6, (iii) 7
7. (i) 7, (ii) 6, (iii) 7,

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98-CS-3, Management Concepts for Engineers

1. In a highly competitive, technological and globalized business world, labour-management is difficult considering the current economic problems involving massive layoffs and plant closings. Explain the following:
 - (i) What must management do to compete more effectively under the current situation?
 - (ii) What are the issues involved from the labour and management viewpoints?
 - (iii) What are some important issues unions are currently championing?

2.
 - (i) One procedure for establishing objectives and gaining employee commitment to those objectives is management by objectives (MBO). What are the steps followed in an MBO program?
 - (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)?

3.
 - (i) What is the logical progression of the marketing process?
 - (ii) Explain the manner by which the quality movement has affected the marketing concept.
 - (iii) What are the three parts of the marketing concept? Explain.

4.
 - (i) Explain the concepts of (a) synthetic systems, and (b) analytic systems, in the context of process manufacturing. Give examples of each.
 - (ii) Explain the concepts of (a) computer-aided design (CAD), (b) computer-aided manufacturing (CAM), and (c) computer-integrated manufacturing (CIM).
 - (iii) What is your understanding of total quality management (TQM) in an organization?

5.
 - (i) Distinguish between short-term and long-term financing and between debt capital and equity capital.
 - (ii) What is the difference between a secured loan and an unsecured loan? Is factoring a form of secured loan?
 - (iii) Explain the reasons for fluctuation of the prices of shares in the stock market.

6.
 - (i) State the current problems faced by human resource management.
 - (ii) What scheduling plans can be used to adjust to employees' needs for flexibility?
 - (iii) Explain the methods used to develop managerial skills in a company. How does networking fit into this process?

7. An internationally recognized author has noted that if you as manager want high performance from your employees, look first at the atmosphere in your company before you start thinking about “changing each individual employee”. The author further noted that most firms create a “stifling atmosphere in which employees feel constrained, controlled and forced to comply with a rigid contract that govern their behaviour”. Now that “information, knowledge, and expertise” have become just as important as capital was in the past, emphasis has shifted from the corporation to the individual.
 - (i) Do you find it surprising that senior executives have to be reminded of these things? How come they are not already aware of this issue since it has been actively discussed in business schools and business periodicals for some years?
 - (ii) Why are companies so slow to adapt to new conditions? Don't they want a better-motivated workforce?
 - (iii) Is it possible that corporations' concentration on downsizing in recent years has blinded them to the changed needs of their remaining employees and managers?