

National Exams December 2008
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

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Marking Scheme (marks)

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

National Examination December 2008
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) What are the means by which a company can motivate to harness employee power?
 - (ii) What characteristics of work affect motivation and performance?
 - (iii) Explain your understanding of (a) goal-setting theory, (b) management by objective (MBO), and (c) reinforcement theory

- 3
 - (i) State the logical progression of the marketing process
 - (ii) Explain the concepts of market segmentation and target marketing
 - (iii) How has the total quality movement affected the marketing concept?

- 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) State the most common causes of financial problems in industry
 - (ii) Explain the three components of a master budget (a) an operating budget, (b) a capital budget, and (c) a cash budget
 - (iii) What are the advantages and disadvantages of issuing stock?

- 6
 - (i) What are the challenges and problems encountered presently in the human resources area?
 - (ii) What compensation systems are used in industry?
 - (iii) What methods are used to develop managerial skills? How does networking fit into this 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?