

**National Exams December 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) 7, (ii) 7, (iii) 6
3. (i) 7, (ii) 7, (iii) 6
4. (i) 6, (ii) 7, (iii) 7
5. (i) 7, (ii) 7, (iii) 6
6. (i) 7, (ii) 7, (iii) 6
7. (i) 7, (ii) 7, (iii) 6,

Front Page

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1. (i) Explain the areas of endeavour in which workers, unions, management and governments can cooperate to make progress, especially in a competitive world market.  
(ii) State your understanding of: (a) grievance procedure, (b) arbitration and (c) mediation.  
(iii) State the restrictions imposed on some workers regarding their rights to strike. Name the various types of employees for whom governments have passed back-to-work legislation.
2. (i) Explain the five characteristics of work in job enrichment theory that are believed to be important in affecting individual motivation and performance.  
(ii) What is your understanding of: (a) goal-setting theory, (b) management by objective (MBO), and (c) reinforcement theory.  
(iii) In the future, it is believed that motivation will come from the job itself, rather than rewards or punishments. Explain what the managers need to provide workers, so that they do a good job.
3. (i) Explain the four types of utility (value) added by marketing to move goods from producers to consumers.  
(ii) Discuss the logical progression from the first to the last step of the marketing process.  
(iii) Explain the concept of target or bull's eye marketing especially for small business.
4. (i) Explain the various approaches that can be taken to improve productivity in the service sector.  
(ii) Explain the concepts of: (a) just-in-time inventory control, (b) flexible manufacturing, and (c) lean manufacturing.  
(iii) State your understanding of the concepts of: (a) materials requirement planning (MRP), (b) manufacturing resource planning (MRPII) and (c) enterprise resource planning (ERP).
5. (i) What are the steps followed in financial planning? Explain by means of a diagram the financial planning process (especially to show the relationships).  
(ii) Distinguish between short-term and long-term financing and between debt and equity capital.  
(iii) Discuss the three components of master budget: (a) an operating budget, (b) a capital budget, and (c) a cash budget.
6. (i) What are the challenges and problems encountered presently in the human resources area?  
(ii) Explain the following training programs: (a) on-the-job training, (b) apprenticeship, (c) off-the-job training, and (d) vestibule training.  
(iii) Describe the methods companies use to recruit new employees and explain some of the problems that make recruitment difficult.

7. From a business perspective, dual-career families create real concerns. There are problems with relocations, child-care and other issues that affect recruiting, productivity, morale, and promotion policies.
  - (i) What are some of the issues you can see developing because of dual-career families? How is this affecting children in such families?
  - (ii) What corporate policies need changing to adapt to these new realities?
  - (iii) What can newlywed couples do to minimize the problems of dual careers?