

**National Exams December 2009**  
**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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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) What are the major topics included in a union contract between union and management?  
(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) What are the levels of Maslow's hierarchy of needs?  
(ii) What is your understanding of Hertzberg's motivation theory? What factors were named by Hertzberg as motivators and hygiene factors?  
(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) In the marketing process, explain the concepts of: (a) societal orientation, (b) relationship marketing and (c) green product.  
(ii) What are the elements of marketing process or mix followed by the marketing manager to please customers.  
(iii) What are the steps followed in the market research process.
4. (i) Explain the concepts of (a) just-in-time (JIT) inventory, (b) flexible manufacturing, and (c) lean manufacturing.  
(ii) Explain the concepts of computer-aided design (CAD) and computer-aided manufacturing (CAM) and their use in the clothing industry.  
(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) State the functions performed by a finance manager.  
(iii) State the features of (a) common stock, (b) preferred stock, and (c) cumulative preferred stock.
6. (i) Explain the following job training programs: (a) on-the-job training, (b) apprenticeship, (c) off-the-job training, and (d) vestibule training.  
(ii) Explain the steps followed in performance appraisal process.  
(iii) What scheduling plans can be used to adjust to employees' needs for flexibility? Explain.
7. In the case of Phillips Cable Ltd., in Brockville, Ontario, 350 workers lost their jobs when the plant was closed. This occurred despite drastic worker concessions in 1991 that were supposed to be "the miracle cure to keep the operations afloat." Brian McDougall, president of Local 510 of the Communications Energy and Paperworkers Union of Canada, said that

everyone was devastated, in shock and disbelief. Answer the following questions:

(i) What would you recommend to union workers whose employer is threatening to close down unless they agree to wage or other concessions?

(ii) Is there some alternative to cutting wages or closing down? What is it?

(iii) Union workers often feel that the company is bluffing when it threatens to close. How can such doubts be settled so that more open negotiations can take place?

(iv) Laws have been passed that require plants with more than a certain number of employees to give up to six months' notice of intention to close. Do you think that such legislation helps businesses to show employees that they are serious about closing a plant and thus get concessions from labour? Are such tactics ethical? Do these laws have any effect on investment decisions