

National Exams May 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) 7, (ii) 7, (iii) 6
2. (i) 6, (ii) 8, (iii) 6
3. (i) 7, (ii) 7, (iii) 6
4. (i) 6, (ii) 7, (iii) 7
5. (i) 6, (ii) 7, (iii) 7
6. (i) 7, (ii) 7, (iii) 6
7. (i) 5, (ii) 5, (iii) 5, (iv) 5

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1. (i) State the steps followed in a collective bargaining process.
(ii) One of the clauses in a union contract deals with the *conditions* attached to hiring employees. Explain the four types of *conditions* (shops).
(iii) State the areas of endeavour in which workers, unions, management and government can cooperate to make future progress.
2. (i) Motivation is the key to releasing employee's power. State the key areas of endeavour that will promote employee motivation.
(ii) Explain the following concepts used to motivate workers to improve worker productivity: (a) job characteristics/enrichment, (b) job enlargement and (c) job rotation.
(iii) Explain the manner by which team work between managers and workers can be built through communication.
3. (i) What are the basic steps followed in the marketing process?
(ii) Explain the manner by which total quality movement has affected the marketing concept.
(iii) In selecting a target market, explain the best segmentation strategy that uses all the variables of a consumer profile.
4. (i) What is your understanding of total quality management (TQM) in an organization?
(ii) Explain the concepts of: (a) critical path method (CPM), (b) program evaluation and review technique (PERT), and (c) Gantt chart.
(iii) State the manner by which the company can deal with people or worker problems while introducing a new technology, such as industrial robots in a company.
5. (i) State the most common causes of financial problems in industry.
(ii) What are the sources of initial long-term financing? Explain briefly the various sources.
(iii) What are the advantages and disadvantages of issuing bonds?
6. (i) What is your understanding of job analysis, job description and job specification? You may explain in terms of a specific job.
(ii) Discuss the methods used to develop managerial skills. How does networking fit into this process?
(iii) There are many laws that affect human resources planning. What areas do these laws cover?

7. Many Canadian companies have adopted a form of workforce management that they believe will enable them to compete better in the world market. They keep a “core of management and valued workers” whom they favour with good benefits and permanent jobs. They take on and shed other workers as business spurs and slumps.” These jobs pay less and have few if any benefits. Answer the following questions:
- (i) What is likely to be the impact of this trend on employee motivation? Will temporary workers be as motivated as permanent employees, especially if they continue to look for a “decent” job?
 - (ii) How will this, in turn, affect production and service to customers? Given the growing importance of teamwork and cooperation, is quality production likely to suffer?
 - (iii) What are the long-term impact on the competitiveness of companies?
 - (iv) How can companies develop employees’ long-term loyalty in such circumstances?