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## B.TECH. DEGREE EXAMINATION, MAY 2014

## Fourth Semester

EN 010 402-PRINCIPLES OF MANAGEMENT
(Common to AI, AV, EC, EI, IC, IT, ME, MT, PO and PE Branches)
[New Scheme-2010 Admission onwards-Regular/Improvement/Supplementary]
Time: Three Hours
Maximum : 100 Marks

## Part A

Answer all questions. Each question carries 3 marks.

1. Define MBO.
2. What is Trade union?
3. What is CPM and PERT ?
4. State the types of Capital.
5. Define the principles of Marketing.

$$
(5 \times 3=15 \text { marks })
$$

## Part B

Answer any five questions.
Each question carries 5 marks.
6. What do you understand by organizational chart ? Explain the basis of it.
7. What are the basic steps in planning the system in Personnel management?
8. Explain briefly the product life cycle.
9. What are the elements of cost? Explain.
10. Explain briefly various steps to promote Sales of a product.
11. What is meant by market research? Explain.
12. What is meant by quality circle?

## Part C

## Answer all questions.

Each full question carries 12 marks.
13. What are the different types of organization structure used in industries? Explain in details.
Or
14. What are the various functions of management ? Explain in details.
15. Discuss in details how industries will recruit and select manpower?
Or
16. Write short notes on the following :
(a) Quality circle functions.
(b) Industrial disputes.

$$
(6+6=12 \text { marks })
$$

17. Consider the details of a distance network as shown below :

| Arc | Distance |
| :---: | :---: |
| $1-2$ | 8 |
| $1-3$ | 5 |
| $1-4$ | 7 |
| $1-5$ | 16 |
| $2-3$ | 15 |
| $2-6$ | 3 |
| $2-7$ | 4 |
| $3-4$ | 5 |


| Arc | Distance |
| :---: | :---: |
| $3-6$ | 6 |
| $4-5$ | 8 |
| $4-6$ | 12 |
| $5-8$ | 7 |
| $6-8$ | 9 |
| $6-9$ | 15 |
| $7-9$ | 12 |
| $8-9$ | 6 |

(a) Construct the distance network.
(b) Find the shortest path from Node 1 to Node 9, using Dijkstra's algorithm.

$$
(6+6=12 \text { marks })
$$

18. The following tables provide cost and time estimates for a seven activity projects.

|  | Time estimate |  | Direct cost estimates (Rs.1000) |  |
| :---: | :---: | :---: | :---: | :---: |
| Activity $(i-j)$ | Normal (weeks) | Crash (weeks) | Normal (Rs.) | $\begin{gathered} \hline \text { Crash } \\ \text { (Rs.) } \end{gathered}$ |
| A (1-2) | 2 | 1 | 10 | 15 |
| B (1-3) | 8 | 5 | 15 | 21 |
| C (2-4) | 4 | 3 | 20 | 24 |
| D (3-4) | 1 | 1 | 7 | 7 |
| E (3-5) | 2 | 1 | 8 | 15 |
| F (4-6) | 5 | 3 | 10 | 16 |
| G (5-6) | 6 | 2 | 12 | 36 |

You are required to :
(a) Draw the activity network of the project.
(b) Using the above information crash the activity step-by-step until all paths are critical.
19. What are the fixed capital and working capital ? Explain various factors affecting working capital.
Or
20. What is the component of cost of a product? Explain in details.
21. Explain the different methods of sales forecasting used in industries.

$$
\mathrm{Or}
$$

22. Write short note on the following :
(a) Sale promotion.
(b) Channel of distribution.

$$
\begin{aligned}
(6+6 & =12 \text { marks }) \\
{[5 \times 12} & =60 \text { marks }]
\end{aligned}
$$

