W'06:3FN:IC402 (1411)

## **ENGINEERING MANAGEMENT**

Time: Three hours

Maximum Marks: 100

Answer FIVE questions, taking ANY TWO from Group A, ANY TWO from Group B and ALL from Group C.

All parts of a question (a, b, etc.) should be answered at one place.

Answer should be brief and to-the-point and be supplemented with neat sketches. Unnecessary long answers may result in loss of marks.

Any missing data or wrong data may be assumed suitably giving proper justification.

Figures on the right-hand side margin indicate full marks.

## Group A

(a) Discuss the contributions of FW Taylor.
 (b) Indicate why the different management functions one of greater importance at different levels of an organization.
 (a) How is a formal organization different from an informal one?

(b) Explain, with suitable examples, the important principles used in developing an organization.

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3. (a) Explain the role of a personnel manager. 10 (b) Discuss the characteristics of various incentive schemes. 10 4. (a) Describe the factors which affect the location choices. both for manufacturing and services. 8 (b) Describe the basic types of layout and indicate when 12 each is best used Group B 5. (a) Describe the purpose of accounting in a business organization. 10 (b) What are the financial statements and how they are used to give a financial picture of business? 10 (a) Explain the different elements of 'marketing mix'. 12 (b) Justify the role of research in marketing. Give examples in support of your answer. 8 7. Describe the fundamental role of computers and information technology in reshaping an organizations. Give suitable examples in operations, finance, marketing and personnel management areas. 20 8. A company has received an order from a good customer for a specially designed electric unit. The contract states that starting on the thirteenth day from now, the firm will experience a penalty of Rs. 100 per day until the job is completed. Indirect project costs amount to Rs. 200 per day. The data on direct costs and activity precedence

relationships are given in the table below.

	Table	:	Electric	Unit	Project	Data
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Activity	Normal Time	Normal Cost	Crash Time	Crash Cost	Immediate Predecessor(s)
	(days)	(Rs.)	(days)	(Rs.)	
A	4	1000	3	1300	
В	7	1400	4	2000	_
C	5	2000	4	2700	
D	6	1200	5	1400	$\boldsymbol{A}$
E	3	900	2	1100	B
F	11	2500	6	3750	C
G	4	800	3	1450	D, $E$
H	3	300	1	500	F, G

- (a) Draw the project network diagram.
- (b) What completion date would you recommend. 16

## Group C

- 9. Explain very briefly the differences between the following with examples: 2×10
  - (i) Planning and organizing.
  - (ii) Accountability and Responsibility.
  - (iii) Job Enlargement and Job Enrichment.
  - (iv) Diversification and Simplification of product lines.
  - (v) Industrial goods and Consumer goods.

- (vi) Current Ratio and Liquidity Ratio.
- (vii) Data Processing and Word Processing.
- (viii) Push system and Pull system.
- (ix) Dependent Demand and Independent Demand.
- (x) Quality and Reliability.