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No.

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CBI1331

**Project and Business Management (New)**  
**(1120)**

P. Pages : 4

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Answer **any two** subquestions from each unit.
5. Use of non programmable electronic pocket calculator is allowed.
6. Dark figures to the right indicate full marks.
7. Assume suitable data, if necessary.

**UNIT - I**

1. a) i) Discuss the planning and organising phase in detail. 5
- ii) Describe briefly the line of balance. 5
- b) An assembly line consist of eight work elements whose elemental times are as follows : 10

Work Element Code	A	B	C	D	E	F	G	H
Element time (Sec.)	60	80	20	40	30	30	50	60

The desired output capacity is 320 number/shift.

- i) Calculate maximum cycle time.
- ii) Calculate theoretical number of work stations.
- c) i) Define scheduling. Explain in detail the techniques of scheduling. 6
- ii) Describe Gantt progress chart with a suitable example. 4

**UNIT - II**

2. a) i) Briefly describe the three types of floats used in network analysis. 6
- ii) Define the following terms : 4
- p) Activity
- q) Event
- r) Critical path
- s) Dangling.

- b) i) From the following data given construct the project network and identify the critical path, its duration and total slack of each activity. 8

Activity	A	B	C	D	E	F	G	H
Immediate Predecessor	--	A	A	B	C,D	D	F	E,G
Time (Weeks)	1	4	3	2	5	2	2	3

- ii) Distinguish between PERT and CPM. 2

- c) The basic cost, time data for jobs in a project are as given below : 10

Job (Activity)	Normal		Crash		Cost of Crashing per day
	Days	Cost (Rs.)	Days	Cost (Rs.)	
A	3	140	2	210	70
B	6	215	5	275	60
C	2	160	1	240	80
D	4	130	3	180	50
E	2	170	1	250	80
F	7	165	4	285	40
G	4	210	3	290	80
H	3	110	2	160	50

The activity (job) dependencies are as below :

- i) A, B, C are starting activities.
  - ii) Activities D, E and F can start when once A is completed.
  - iii) Activity G can start after B and D are completed.
  - iv) Activity H can start after C and E are completed.
  - v) Activities G, F and H are the final activities.
- 1) Draw the network and indicate critical path.
  - 2) What is the total time required to complete the project?
  - 3) If the project is to be completed in 8 days, what is the minimum cost to be incurred? Indicate this cheapest cost schedule.

## UNIT - III

3. a) What is ownership organisation? Name the various forms of ownership organisation. Discuss them briefly. 10
- b) i) Differentiate between private limited company and public limited company. 5
- ii) Compare between co-operative society and joint stock company. 5
- c) Define co-operative organisation. State the characteristics of co-operative organisation. What are the advantages and limitations of co-operative organisation. 10

## UNIT - IV

4. a) Differentiate between : 10
- i) Debentures and shares
- ii) Preference shares and Equity shares.
- b) i) Define financial management. What are the functions of financial management? 5
- ii) Explain in detail the elements of cost. 5
- c) XYZ Ltd. manufactures water pumps. Each pumps is priced at Rs. 2500. The variable cost of production of pump is Rs. 2000 while fixed cost is Rs. 2,00,000. Calculate : 10
- i) PV ratio
- ii) BEP sales
- iii) Sales to earn reasonable pretax profit of Rs. 60,000.
- iv) Sales to earn reasonable after tax profit of Rs. 30,000 assuming 60% as the rate of taxation.
- v) BEP sales if selling price is increased by 10%.

## UNIT - V

5. a) i) Annual consumption of a material is 4000kg per year. Material costs the company at Rs. 100 per kg. The procurement cost and the inventory carrying cost have been calculated at Rs. 50 and 20% respectively. Supplier offers a discount of 2% in procurement cost of material if order of 1000kg or above is placed. Recommend company on the basis of your calculations. 8
- ii) What is mean by ABC analysis. 2
- b) Define materials management. Discuss in detail the functions and objectives of materials management. 10
- c) What is purchasing? What are the five Rights of purchasing? Explain them briefly? What are the objectives of scientific purchasing? 10

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