Practice Question on Resource Planning Systems

1. Given the following production plan, use a (a) chase production strategy and (b) level production strategy to compute the monthly production, ending inventory/(backlog) and workforce levels. A worker is capable of producing 100 units per month. Assume the beginning inventory as of January is zero, and the firm desires to have zero inventory at the end of June.

MONTH	JAN	FEB	MAR	APR	MAY	JUN
Demand	2000	3000	5000	6000	6000	2000
Production						
Ending Inventory						
Workforce						

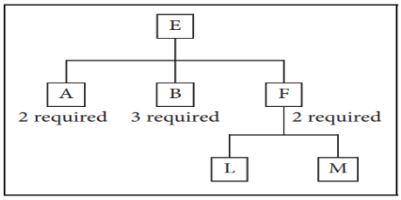
2. Given the following production plan, use a (a) chase production strategy and (b) level production strategy to compute the monthly production, ending inventory/(backlog) and workforce levels. A worker can produce 50 units per month. Assume that the beginning inventory in January is 500 units, and the firm desires to have 200 of inventory at the end of June.

MONTH	JAN	FEB	MAR	APR	MAY	JUN
Demand	2000	3000	5000	6000	6000	2000
Production						
Ending Inventory						
Workforce						

3. Given the following production schedule, compute the available-to-promise quantities.

WEEK		1	2	3	4	5	6	7	8
Model A									
MPS	BI = 60	20	30	20	20	20	50	0	20
Committed Customer Orders		50	10	30	10	20	20	10	0
ATP:D									

4. The bill of materials for a finished product E, inventory status and other relevant information are given below. Compute the planned order releases and projected on hand balances for parts E, F and M.



PART E		1	2	3	4	5	6
Gross Requirements		20	0	0	20	0	40
Scheduled Receipts							
Projected On-hand Inventory	20						
Planned Order Releases							

Q = 50; LT = 2; SS = 0

PART F		1	2	3	4	5	6
Gross Requirements							
Scheduled Receipts				50			
Projected On-hand Inventory	120						
Planned Order Releases							

Q = 50; LT = 2; SS = 20

PART M		1	2	3	4	5	6
Gross Requirements							
Scheduled Receipts		60					
Projected On-hand Inventory	10						
Planned Order Releases							

Q = 60; LT = 1; SS = 30