

### Practical Assessment using Excel and LP assistant

In the preparation for the winter season, a clothing company is manufacturing parka and goose overcoats, insulated pants, and gloves. All products are manufactured in four different departments cutting, sewing, insulating and packaging. The company has received firm orders for its products. The contract stipulates a penalty for undelivered items. The following table provides the pertinent data of the situation

Department	Times per units (hr)				capacity (hr)
	Parka	goose	pants	gloves	
Cutting	.30	.30	.25	.15	1000
Insulating	.25	.35	.30	.10	1000
Sewing	.45	.50	.40	.22	1000
Packaging	.15	.15	.1	.05	1000
Demand	800	750	600	500	
Unit Profit	30	40	20	10	
Unit Penalty	15	20	10	8	

Devise an optimal production plan for the company.