King Saud University Industrial Engineering Department



IE 314: Operations Management II Tutorial Quiz # Make up

Name:

There are bunch of jobs to be processed on 2 machines; A & B. Some jobs are to be processed only on machine A, some only on machine B, some are to be processed on both machines in the order A then B, and finally some jobs are to be processed on both machines in the order B then A. Find the optimum order of jobs on both machines to minimize the total processing time (Hint: Use Johnson rule only with the jobs that require the two machines processing).

Job	Machine (A)	Machine (B)	Order	
1	20	0	Α	
2	70	40	$A \rightarrow B$	
3	30	60	$A \rightarrow B$	
4	0	70	В	
5	10	30	$A \rightarrow B$	
6	30	10	$B \rightarrow A$	
7	20	70	$B \rightarrow A$	
8	0	40	В	
9	40	0	Α	