

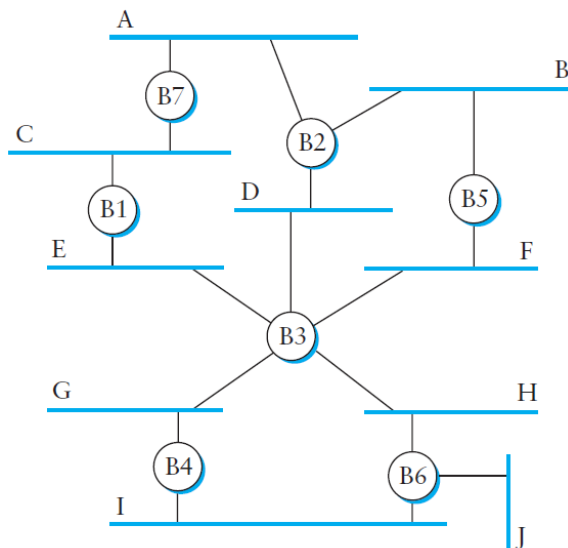
IS8055556: Data and Computer Communications
Semester 2 5786
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Bridges and Spanning Tree Algorithm

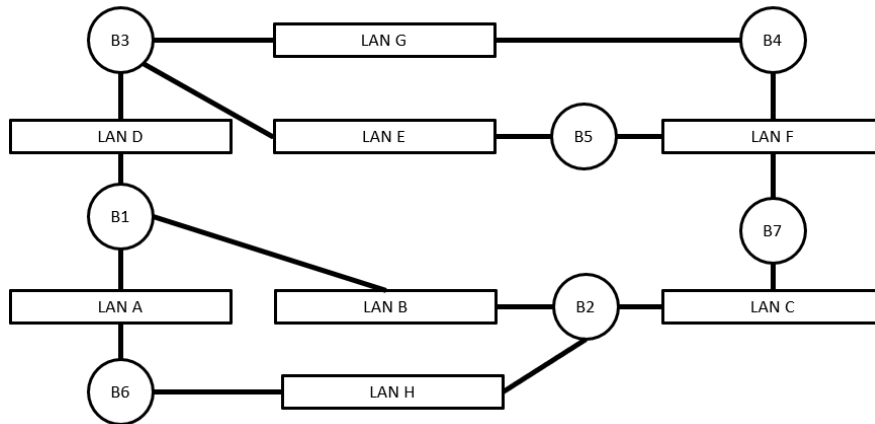
1 Spanning Tree

Given the extended LAN shown below, assume that bridge B1 suffers catastrophic failure. Indicate which ports are not selected by the spanning tree algorithm after the recovery process and a new tree has been formed.



2 Spanning Tree Algorithm

Consider the following bridge mesh. The bridges are shown as circles with numbering that begins with “B1”. The LANs are shown as rectangles with a single letter inside starting with “A”. Draw the final state of the bridges and links after the spanning tree algorithm has run. Assign each connection between a bridge and a LAN with “rp” if it’s a root port, “d” if it’s the designated bridge, and \emptyset if it has no assignment at all.



Fill your answers in the table below.

Link	Status
B1-A	
B1-B	
B1-D	
B2-B	
B2-C	
B2-H	
B3-D	
B3-E	
B3-G	
B4-F	
B4-G	
B5-E	
B5-F	
B6-A	
B6-H	
B7-C	
B7-F	