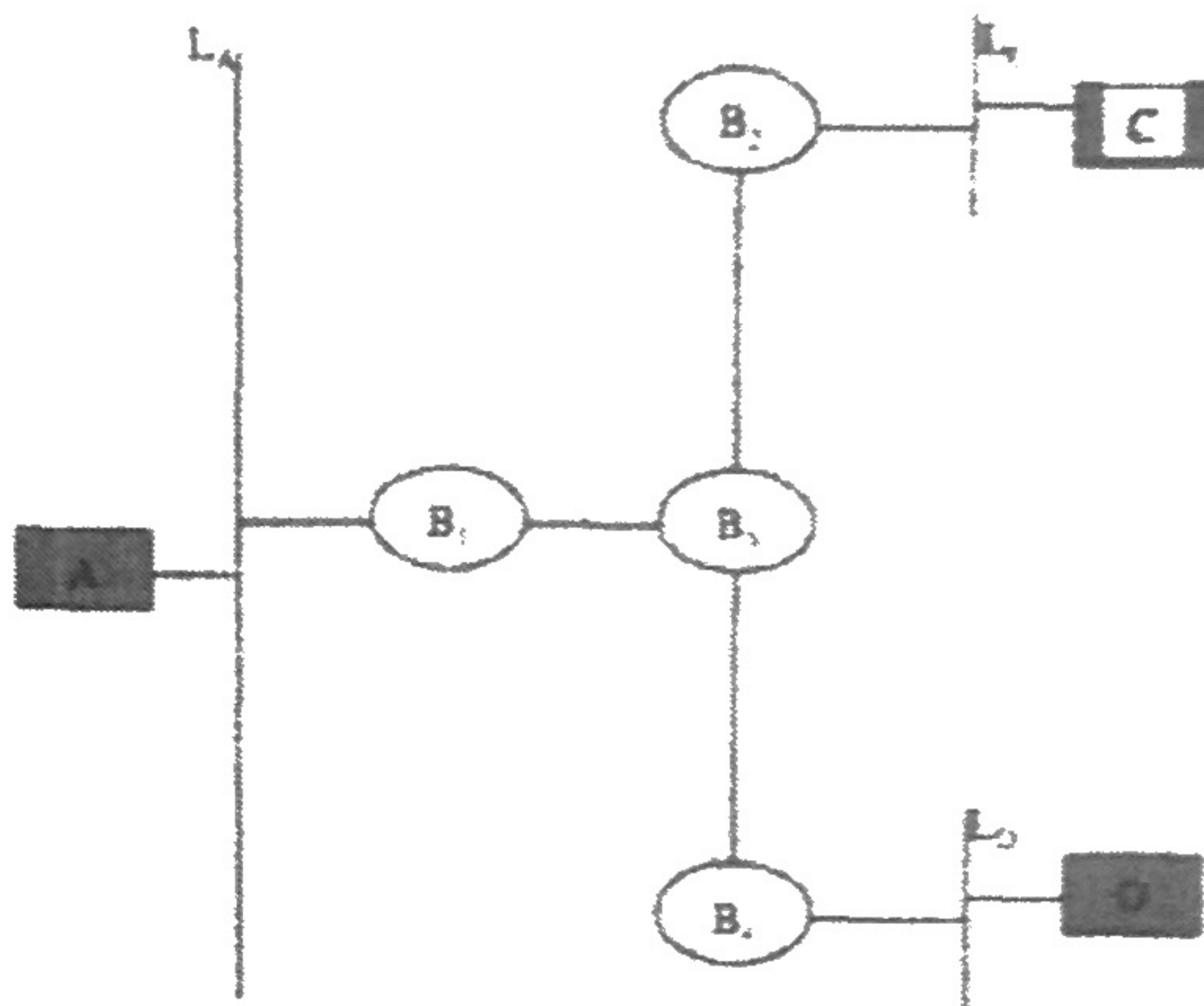


12. [12 points]: Consider the bridge topology shown the figure below. Assuming that all of the forwarding tables are initially empty, write out the forwarding tables at each of the four bridges B_1 through B_4 at the conclusion of the following transmissions:



1. A sends to D
2. D sends to A
3. C sends to A

In the forwarding table at each node, identify the port by the unique LAN segment (L_A , L_C , or L_D) reachable using that port, unless there isn't one, in which case use the identifier of the neighboring bridge to identify the port.

After A sends to D:

B_1		B_2		B_3		B_4	
Destination	Port	Destination	Port	Destination	Port	Destination	Port
A	L_A	A	B_3	A	B_1	A	B_3
C	—	C	—	C	—	C	—
D	—	D	—	D	—	D	—

After D sends to A:

B_1		B_2		B_3		B_4	
Destination	Port	Destination	Port	Destination	Port	Destination	Port
A	L_A	A	B_3	A	B_1	A	B_3
C	—	C	—	C	—	C	—
D	B_3	D	—	D	B_4	D	L_D

After C sends to A:

B_1		B_2		B_3		B_4	
Destination	Port	Destination	Port	Destination	Port	Destination	Port
A	L_A	A	B_3	A	B_1	A	B_3
C	B_3	C	L_C	C	B_2	C	—
D	B_3	D	—	D	B_4	D	L_D

Name: