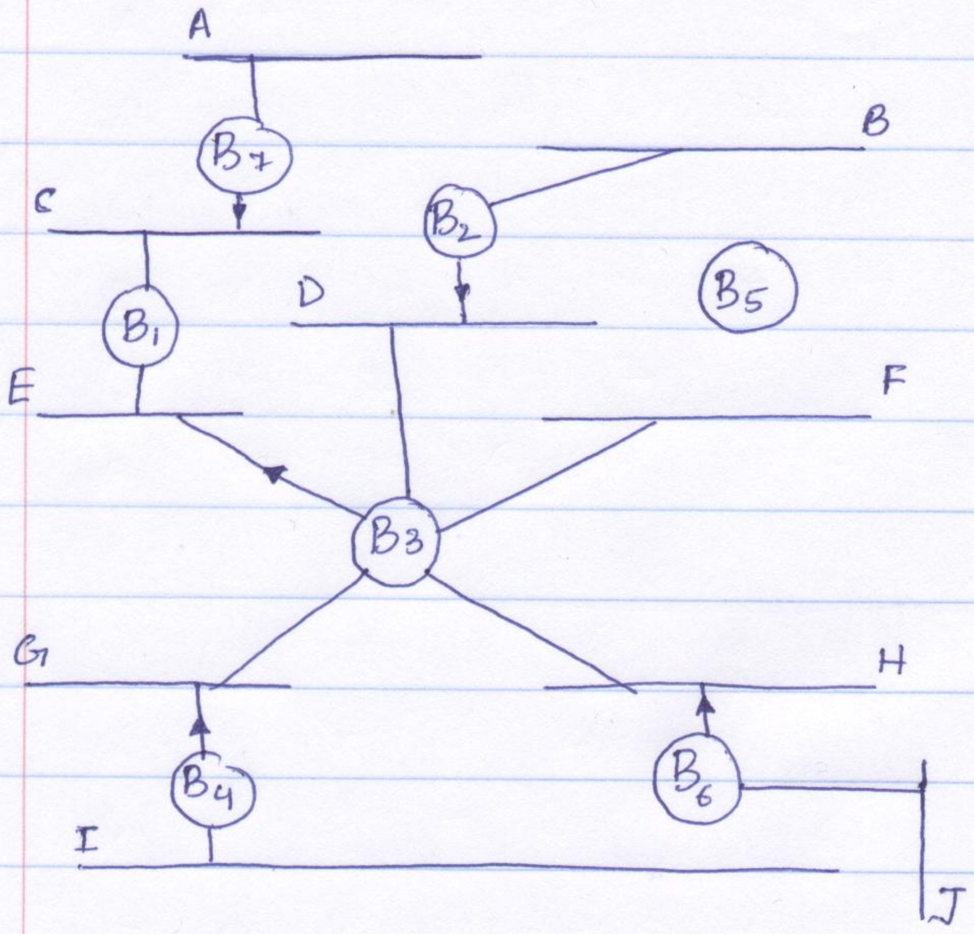
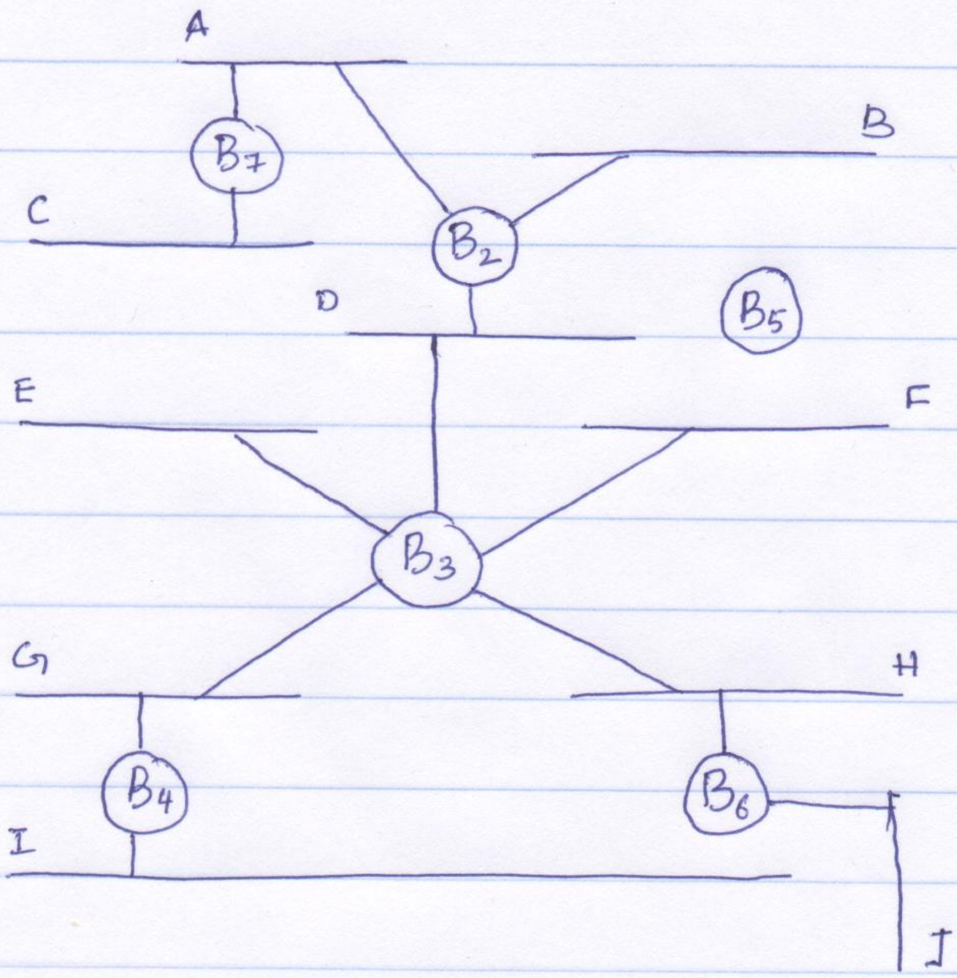
13.



B_1 is the root bridge

14.



B_2 is the root bridge

15. A sends to C: Packet flooded, so everyone knows which port A is on.

C to A: B_2 forwards to only B_1, so B_4 doesn't know which port C is on.

D to C: B_2 forwards to B_3, so B_1 doesn't know D.

For B_1: Port A - A Port B_2 - C

For B_2 Port B1 - A Port B3 - C Port B4 - D

For B_3 Port B2 - A, D Port C - C

For B_4 Port B2 - A Port D - D

15. DISTANCE VECTOR TABLES.

(a)

	A	B	C	D	E	F
A	0	∞	3	8	∞	∞
B	∞	0	∞	∞	2	∞
C	3	∞	0	∞	1	6
D	8	∞	∞	0	2	∞
E	∞	2	1	2	0	∞
F	∞	∞	6	∞	∞	0

(b)

	A	B	C	D	E	F
A	0	∞	3	8	4	9
B	∞	0	3	4	2	∞
C	3	3	0	3	1	6
D	8	4	3	0	2	∞
E	4	2	1	2	0	7
F	9	∞	6	∞	7	0

(c)

	A	B	C	D	E	F
A	0	6	3	6	4	9
B	6	0	3	4	2	9
C	3	3	0	3	1	6
D	6	4	3	0	2	9
E	4	2	1	2	0	7
F	9	9	6	9	7	0

25. (b) Without poisson reverse, A and B would send each other updates without mentioning X. So the false information about X would remain there till the entries age out. So the loop remains for a while

With poisson reverse, in the first table exchange A would sent ∞ (X, ∞) to B and vice versa. So this loop is broken at the first exchange.

(c) Step 1: A, B announce their route to X via C to each other

Step 2: C tells A, B that it can no longer reach X

Step 3: B, A receive each other's announcements from step 1.

28.

Step	Confirmed	Tentative
1	(A, 0, -)	
2.	(A, 0, -)	(D, 2, D) (B, 5, B)
3.	(A, 0, -) (D, 2, D)	(B, 4, D) (E, 7, D)
4	(A, 0, -) (D, 2, D) (B, 4, D)	(E, 6, D) (C, 8, D)
5	(A, 0, -) (D, 2, D) (B, 4, D) (E, 6, D)	(C, 7, D)
6	(A, 0, -) (D, 2, D) (B, 4, D) (E, 6, D) (C, 7, D)	Done

29. Refer to text book