DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

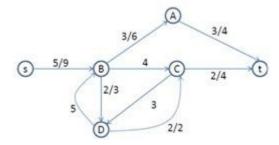
CSE207 (DATA STRUCTURES AND ALGORITHMS II)

Class Test 2 (Sep 27, 2020), Time: 25 minutes, Total Marks: 20

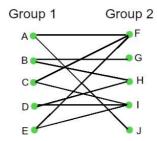
1. For the flow network shown in the figure, answer the following questions.

1+2+4+2=9

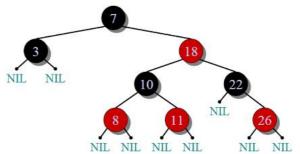
- i) Find the value of the flow.
- ii) Draw the residual network.
- iii) Using the residual network of ii), find the value of maximum flow and draw the maximum flow network.
- iv) Also draw the residual network of the maximum flow network.



2. Find maximum matching of the following bipartite graph using maximum flow.



3. For the following red-black tree, draw the red-black trees that result after inserting 15 and then deleting 7 from the resulting red-black tree after insertion. 6



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