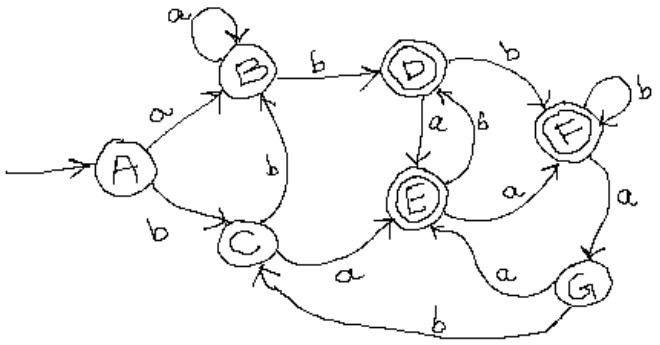
CSIS Dept; BPHC; 1st Semester 2020-21

Theory of Computation (CSF351)

Test-2 17-10-2020; Time 30 Mins. Max marks: 30 Wt:15%

Q1. Look at the following DFA.



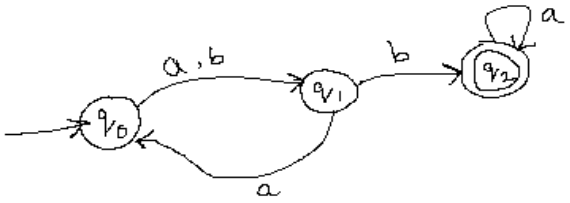
A. Give 1-equivalent sets/partitions of states ($\prod_1$) for the above DFA. [6 marks]

B. Give 2-equivalent sets/partitions of states ($\prod_2$) for the above DFA. [8 marks]

C. How many states will be there in the corresponding minimal-state DFA for the above DFA. [4 marks]

Note: Follow the notations used in the class.

Q2. Look at the following FA.



Give the Regular Expression for the language accepted by the above FA. [6 marks]

Q3. If the language ***L*** is represented by Regular Expression- ***(aUb)*b*.**

Give the DFA for complement of ***L***. [6 marks]