

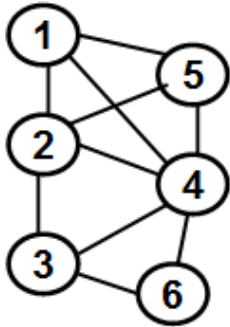
**CSC 641 Network Science, Spring 2017, Instructor: Dr. Natarajan Meghanathan
Quiz 2 (Take Home)**

Due: March 7, 2017 (4 PM, in class). Submit a printed hardcopy in class (with this quiz sheet as a cover page and your name and J# on the top of the sheet).

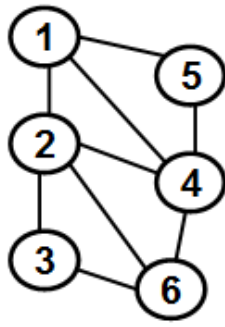
For the graph assigned to you, determine the following:

- (1: 5 pts) Degree centrality; (2: 10 pts) Eigenvector centrality; (3: 15 pts) Closeness centrality
- (4: 10 pts) Farness centrality;
- (5: 10 pts) LCCDC of the vertices having the largest degree and the smallest degree
- (6: 10 pts) Determine the Kendall's correlation coefficient between centrality metrics (1) and (3)
- (7: 15 pts) Determine the rank-based correlation coefficient between centrality metrics (1) and (2)

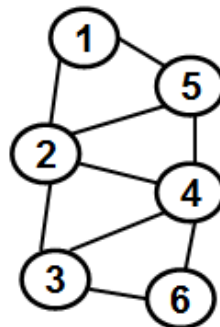
For (2) and (4), you could use the Spectral analysis Java program given to you.



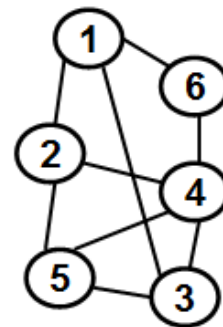
Ashley Abraham



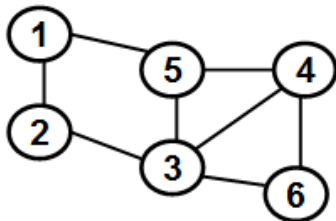
Jonathan Adams



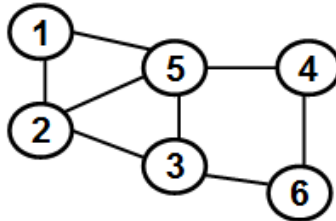
Uzochukwu Akabueze



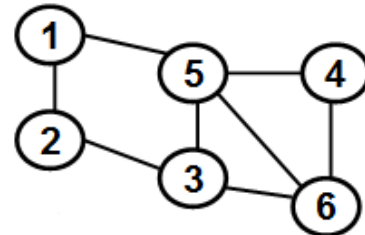
Mahzabin Akhter



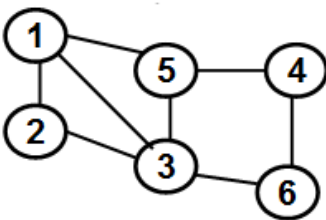
Omar Aljawfi



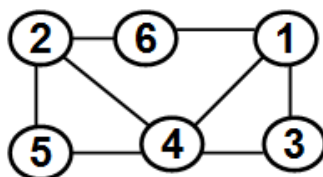
Bejnamin Garlington



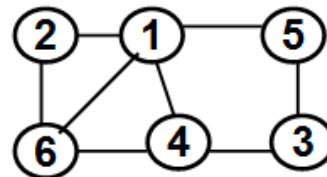
Md Mohiuddin Hasan



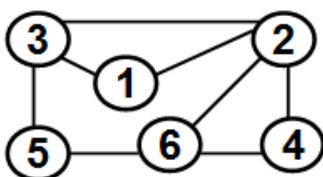
Anthony Lam



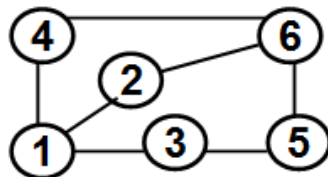
Peter Lowe



Md A. Rahman



Maruful A. Sumon



Ying Zhang

Student Name: _____

J#: _____