Important Instructions:

1) Open this MS-Word document and start writing answers below each respective question given on page 2.
2) Answers the question in the same sequence in which they appear.
3) Provide to the point and concrete answers.
4) First read the questions and understand what is required of you before writing the answer.
5) Attempt the paper yourself and do not copy from your friends or the Internet. Students with exactly similar answers or copy paste from the Internet will not get any marks for their assignment.
6) You can contact me for help if you have any doubt in the above instructions or the assignment questions.
7) All questions must be attempted.
8) Do not forget to write your name, university ID, class and section information.
9) Rename you answer file with your university ID# before uploading to SIC.
10) When you are finished with writing your answers and are ready to submit your answer, convert it to PDF (no MS Word) and upload it to SIC unzipped, before the deadline mentioned on SIC.
11) Do not make any changes to the format provided.
12) Failure in following the above instructions might result in deduction of marks.

Sessional Assignment, Course: - Mobile Computing

Deadline: - Mentioned on SIC **Marks: - 20**

Program: - BS (CS), BS-SE **Dated: 11 April 2020**

Related Course: Lecture 7 and 8.

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Class and Section:_8 semester "B"

Q1: In what aspects is an Adhoc network different from infrastructure networks? (3)

Answer: An adhoc network is an temporary network, it is a decentralized type of wireless network because it does not rely on pre-existing infrastructure such as routers in wired networks as compared to infrastructure network, infrastructure network is a centralized network having devices on the network that communicates through a single access network: a device that allows wireless devices to connect to a wired network usingWi-Fi.

Q2: What is the difference between reactive and proactive routing protocols in MANETS? (3)

Answers: In pro-active routing, each node has to maintain one or more tables to store routing information and any changes in network topology need to be reflected by propagating updates throughout the network in order to maintain a consistent network view whereas in reactive routing they do not maintain routing information or routing activity at the network nodes if there is no communication, if a node want to send a packet than it obtains necessary path when required.

Q3: Differentiate between regular and MPR flooding? (2)

Answers: The difference between regular and MPR flooding is that MPR nodes have selected neighbors and will retransmit a packet broadcasted by the node. Obviously, the smaller this set is, the more efficient the mechanism will be whereas in regular flooding, a source node broadcast message, each node that receives the message forwards unless it has been previously forwarded.

Q4: On which path is the route reply message sent in DSR? (3)

Answers: RREP packet(route reply) sends complete path to sender, so rrep is used to reply

Q5: What is source routing? (2)

Answer 5: Source routing is a specific routing process where senders can specify the route that data packets take through a network. This allows for troubleshooting and various transmission goals. Source routing is an alternative to traditional routing where packets just move through a network based on their destination. Source routing is also known as path addressing.

Q6: If AODV does not store roue information in the packet then how does the routing works? (4)

Answer: In AODV, source node does not carry the complete path and each node only knows its previous and next hop info and each node maintains route cache and they update it time to time when they discover new node, so this is how routing works in AODV.

Q7. What are the fuctions of sequence numbers in AODV? (3)

Answers: In AODV, sequence numbers is used to determine an up-to-date path to a destination. Every entry in the routing table is associated with a sequence number. The sequence number act as a route timestamp, ensuring freshness of the route.