

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

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Related Course: Lecture 7 and 8.

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Class and Section: Software Engineering 8th Semester (Section-A)

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

Answer: Adhoc network is also known as the 'Peer to peer' network mode. It does not require centralized AP. However, the Infrastructure network requires a central point of the devices that it will connect to. Infrastructure network is a centralized communication network. All data is accessed through & from a single master unit. While an adhoc is a temporary wireless connection. It is decentralized in nature.

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

Answer: The routing protocols of a RRP is fundamentally higher because of the on demand protocols where the routes are generated on user demand, whereas the PRP is lower as compared because routes are predefined in this protocol. Secondly, Periodic update in the RRP is not required at any time but in PRP periodic is always required as each route is being traced.

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

Answer: When each packet is flooded & the node further replicates the packet as it receives it the first time. In this way starting it from the source each node in connected component will receive at least once is called regular flooding. Whereas in MPR flooding the number of connection relapses but it still ensures each node in the network for at least once, receives the flooded packet.

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

Answer: DSR uses the following paths to send route reply message;
PREP is used when the links are unbiased, MAC is used when links are directional.

Q5: What is source routing?

(2)

Answer: It is a specific routing process where the senders can specify the route which data packets take through a network. It allows for troubleshooting and various transmission goals and it is alternative to customary routing where packets move through a network which is based on their destination

Q6: If AODV does not store route information in the packet then how does the routing works?

(4)

Answer: As each packet forwarder remembers the path back to the sender and the sender who send a message to the receiver through source routing, hence storing information is not required in routing,

Q7: What are the functions of sequence numbers in AODV?

(3)

Answer: Each entry in the path destination is assigned with a sequence number which assembles the data in its secure format & sends it to the desired receiver or sender. Sequence number is labeled because the sender knows when the packet has arrived and when it should be forwarded.