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.

Student Name: <u>Raashid Khan</u>   Student ID#: <u>12997</u>

Class and Section: semester 8 section A

Q1: **In what aspects is an Adhoc network different from infrastructure networks? (3)**
Ans: Adhoc is a continuously self configuring infrastructure less network of mobile devices connected without wire each device is free to move independtly infrastructure network all communicate through a single access point a device that
Allow wireless devices to connect to a wired network using wifi

Q2: **What is the difference between reactive and proactive routing protocols in MANETS?**
(3)
Ans: Proactive protocols are much slower than the reactive protocols in term of performance
Reactive routing protocols in which does not required a periodic update and proactive routing protocols that has required periodic update proactive protocols maintain a different number of routing tables varying protocols to protocols

Q3: Differentiate between regular and MPR flooding?   **(2)**
Ans: MPR multipoint relay minimizes the flooding of broadcast packet in the network by reducing duplicate retransmission in the same region MPR set of selected neighbor nodes
Regular flooding is when a packet is flooded and each node in a network replicate this packet the first time it receive . This way starting it from the source of the packet each node in the component is connected to the source will receive it at least once.

Q4: **On which path is the route reply message sent in DSR?** (3)
Ans : DSR uses the following routes
MAC router are used
PREP are used

Q5: **What is source routing?** (2)
Ans: Source routing are also called path addressing source routing is a specific routing
process where the sender can specify the route which data through a network
it allow for troubleshooting and various transmission goals .

Q6: **If AODV does not store route information in the packet then how does the routing**
works?
Ans; if AODV does not store route information in the packet then the sender who send the
message to the receiver it back to way of source routing .
(4)

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

Ans: Route need to be included in packet header
sequence number are used to avoid old broken routes
Sequence number prevent information of routing loops
Unused route expire even if topology does not change.