Printed Pages : 1 **Roll No.** ☐☐☐☐☐☐☐☐☐☐☐ **MTCS-202**

M. TECH.

THEORY EXAMINATION (SEM–II) 2016-17

WIRELESS MOBILE NETWORKS

Time : 3 Hours *Max. Marks : 70*

Note : *Be precise in your answer. In case of numerical problem assume data wherever not provided.*

SECTION- A

1. **Attempt all parts of this Section** **7×2=14**

   (a) What is Wireless Network? Discuss features of wireless networks.

   (b) What is mobile network? Why is so important now?

   (c) Brief the problems of hidden and exposed terminals.

   (d) Discuss Indirect TCP and Snooping TCP.

   (e) Discuss the working of basic CSMA/CA MAC protocol.

   (f) What is DHCP and how is it work?

   (g) Explain Handover in GSM.

SECTION- B

2. **Attempt any three parts of the following** **3×7=21**

   (a) Compare between the TDMA, and CDMA.

   (b) Compare the Indirect TCP and Mobile TCP in transport layer of mobile networks.

   (c) List and explain the challenges in MANETs.

   (d) Explain how they are addressed in IEEE 802.11 standards for WLANs.

   (e) Deficiencies of existing GEO/MEO/LEO Satellite Systems in wireless mobile network.

SECTION- C

3. **Attempt all questions in this section.** **5×7=35**

   (a) Consider a wired point-to-point network. List some performance measures.

                         OR

   List the 7 layers in OSI hierarchy and their functions. Why such a hierarchical approach to networking is utilized?

   (b) Write short notes on WAP Security.

                          OR

   What is smart client security and how it is used in mobile environment?

   (c) Explain the functions of Link manager in Bluetooth.

                          OR

   Explain WWW and Mobility.

   (d) Compare SDMA, and FDMA.

                          OR

   Goals of mobile IP in mobile network and explain its working.

   (e) Explain in detail about selective tuning techniques.

                          OR

   Explain routing principle of Ad-hoc Networks.