

Information Technology : Paper II - Mobile Computing, Advanced Computer Networks..

(3 Hours)

[Total Marks: 75]

- N. B.: (1) All questions are compulsory.
 (2) Make suitable assumptions wherever necessary and state the assumptions made.
 (3) Answers to the same question must be written together.
 (4) Numbers to the right indicate marks.
 (5) Draw neat labeled diagrams wherever necessary.
 (6) Use of Non-programmable calculators is allowed.

SECTION – I

- Q 1. A Explain in detail services offered by GSM architecture. 6
 B Differentiate Between GEO,MEO,LEO 6
 OR
 Q 1. A What are the different applications of wireless and mobile application? 6
 B Explain Modulation and Demodulation. Also explain AM and FM 6
 Q 2. A What is WML? Explain WML script 6
 B What are the problems of signal propagation? Why do radio waves always follow a straight line? 7
 OR
 Q 2. A What is the basic purpose of DHCP? How DHCP can be used for mobility and support of the mobile IP? 6
 B Write a note on TETRA. Also mention its applications. 7
 Q 3. A Write a note on ALOHA. Explain what is Slotted ALOHA 6
 B Explain Reverse Tuning For Mobile IP. 7
 OR
 Q 3. A What characteristics do the different orbits have? What are their pros and cons? 6
 B Write note on Switched Multi-Megabit Data Service 7

SECTION II

Q 4. A Write short notes on following **6**

1) Hub And Spoke Topology 2)Wireless LAN

B Briefly explain the Virtual Private Network **6**

OR

Q 4. A Write note on Distance Vector Protocol **6**

B Explain Dense Wavelength Division Multiplexing (DWDM) with the help of diagram **6**

Q 5. A Write the functions of LLC and MAC sub-layers. **6**

B What do you mean by broadcast transmission? Explain cyclical repetition of data with example **6**

OR

Q 5. A Discuss the advantages and disadvantages of SONET. **6**

B What is Frame Relay? State the advantages and disadvantages of FR. **6**

Q 6. A Write short note on Physical Layer Protocol and Interfaces. **6**

B Explain the X.25 protocol in detail **7**

OR

Q 6. A Explain ATM IN Brief. **6**

B Write short note on Packet Switching and Access Network Design **7**
