

R16

Code No: 136CX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, May - 2019

MOBILE COMPUTING

(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

(25 Marks)

- 1.a) List out the different types of logical channels that are used in GSM. [2]
- b) What are the characteristics of communication devices? [3]
- c) What are the drawbacks of FDMA? [2]
- d) What is tunneling? [3]
- e) What is meant by timeout freezing in mobile transport layer? [2]
- f) What are the advantages of hoarding data at the mobile device? [3]
- g) What is data synchronization? [2]
- h) Explain the functions of Pull based mechanisms in data delivery mechanisms. [3]
- i) What are the features of WAP? [2]
- j) What are the properties of MANET? [3]

PART - B

(50 Marks)

2. Explain the system architecture of GSM with neat sketch. [10]
- OR**
3. Explain the protocol architecture of DECT. [10]
- 4.a) Describe about the MAC layer of IEEE 802.11. [5+5]
- b) Explain about the CDMA and about its versions.
- OR**
- 5.a) What is the reason for the failure of MAC schemes in wireless networks. What is done in wired networks to avoid this effect? [5+5]
- b) Explain about the Dynamic Host Configuration Protocol.
- 6.a) What are the implications of traditional TCP on mobility? Discuss any one strategy that attempts to increase TCP performance in wireless and mobile environment. [5+5]
- b) Explain about the data recovery process.
- OR**
- 7.a) Explain the issues related to quality of service. [5+5]
- b) Explain the header format of Mobile TCP.