

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER- V • EXAMINATION – Winter 2016

Subject Code:2650016

Date:28/11 /2016

Subject Name: Wireless Communication Mobile

Time:10.30 am to 01.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** What are the different tiers in three tier architecture of mobile computing? **07**
Describe the functions of these tiers.
- (b)** Explain following protocol used in the Bluetooth technology. **07**
1. Link Manager Protocol.
2. Logical Link Control and Adaptation Protocol.
3. Service Discovery protocol.
4. RFCOMM
5. Baseband
- Q.2 (a)** How does Mobile IP works? Explain with diagram. **07**
- (b)** What are HLR and VLR in GSM? Describe its functions in call routing and roaming. **07**
- OR**
- (b)** Explain functional architecture of GPRS system. What is the frequency range of uplink and downlink in GPRS network? **07**
- Q.3 (a)** Give functional differences between CDMA and GSM **07**
- (b)** What are AOC and SOC client? Compare AOC and SOC clients **07**
- OR**
- Q.3 (a)** Explain concerned parameters and benefits of wireless network. **07**
- (b)** State the requirements of WAP and explain different layers of WAP. What are the advantages of WML Script over WML? **07**
- Q.4 (a)** What is spread spectrum? Write Note on TDMA, FDMA , CDMA. **07**
- (b)** What is middleware? Describe its significance in handling the context of any application. **07**
- OR**
- Q.4 (a)** Explain Value Added Services Through SMS **07**
- (b)** What is Handoff? Explain Types of Handoff. **07**
- Q.5 (a)** Explain the architecture of SMS. **07**
- (b)** Write brief notes on: **07**
a. CCIPP
b. Policy Manager
- OR**
- Q.5 (a)** Explain the IEEE 802.11 family of standards. **07**
- (b)** What do you understand by security algorithms and security protocols? **07**
Differentiate between security algorithm and security protocols.
