

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER- 5 • EXAMINATION – SUMMER 2016

Subject Code: 650016**Date: 13/05/2016****Subject Name: Wireless Communication Mobile****Time: 10:30 AM to 01:00****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) State TRUE or FALSE 07**
- 1) InfraRed technology needs Line of Sight to send the signal.
 - 2) In Refraction, the angle of incidence is equal to the angle of reflection.
 - 3) Group of Piconet is called as Scatternet in Bluetooth technology.
 - 4) Active tags are powered by internal battery and are typically read and write both.
 - 5) In Proactive Algorithms of Mobile Adhoc Network (MANET), it takes lazy approach to decide the route.
 - 6) The Gateway GPRS Support Node acts as an interface and a router to external networks.
 - 7) In Wireless LAN, an independent BSS is an ad-hoc network that contains no access points.
- (b) What is RFID ? Explain various types of RFID tag 07**
- Q.2 (a) Briefly explain 3-tier architecture of mobile computing 07**
- (b) What is M-TCP ? Explain its advantages and disadvantages 07**
- OR**
- (b) Explain IEEE standard of 802.16 (WiMAX) and its types. 07**
- Q.3 (a) Briefly explain Bluetooth Protocol Stack in brief. 07**
- (b) What is Snooping TCP ? Explain briefly 07**
- OR**
- Q.3 (a) Explain how WiMAX works. 07**
- (b) Differentiate IPv4 and IPv6. 07**
- Q.4 (a) Briefly explain role of SGSN and GGSN in GPRS with diagram. 07**
- (b) Differentiate GSM and CDMA 07**
- OR**
- Q.4 (a) What is Symmetric Key Encryption ? Explain any one from DES or AES algorithm. 07**
- (b) Briefly explain how WAP model works. 07**
- Q.5 (a) What is H.323 ? Explain its architecture 07**
- (b) What is Spread Spectrum Technology ? Explain different spreading techniques 07**
- OR**
- Q.5 (a) What is WML and WML Script ? Explain briefly 07**
- (b) Explain various IEEE standards of 802.11 07**
