

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER- VII• EXAMINATION – WINTER 2014**

**Subject Code:170702****Date: 02/12/2014****Subject Name: Mobile Computing****Time:10:30am 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) Explain in detail: Strengths of SMS **07**  
(b) Discuss data services in GPRS. Describe applications suitable for GPRS. **07**
- Q.2** (a) Describe MMS in detail. **07**  
(b) Describe design considerations for Mobile Computing. **07**
- OR**
- (b) Draw and explain the mobile computing architecture. **07**
- Q.3** (a) Discuss the difference between H.323 and SIP. **07**  
(b) Explain in detail Direct Sequence Spread Spectrum (DSSS). **07**
- OR**
- Q.3** (a) What are the different real-time protocols available for real-time data transmission over IP? Explain each of them. **07**  
(b) Describe Wireless LAN advantages. Also explain mobility in wireless LAN. **07**
- Q.4** (a) Explain Bluetooth Protocol Stack. **07**  
(b) Describe symmetric key cryptography and public key cryptography. **07**
- OR**
- Q.4** (a) Draw and explain 3GPP Security architecture. **07**  
(b) How does Mobile IP works? Also briefly explain Mobile Computing OS. **07**
- Q.5** (a) Draw and Explain Call routing for a mobile terminating call in GSM. **07**  
(b) Describe the contrast between 3G and WiFi technologies. **07**
- OR**
- Q.5** (a) Describe IPV6 in detail. **07**  
(b) Explain snooping TCP and mobile TCP. **07**

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