

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (OLD) EXAMINATION – WINTER 2018****Subject Code: 170702N****Date: 06/12/2018****Subject Name: Wireless Communication and Mobile Programming****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) Draw and explain the three tier architecture of mobile computing. **07**
(b) What is Mobile IP? Explain Discovery, Registration and Tunneling with Mobile IP **07**
- Q.2** (a) Explain call routing in GSM with block diagram. **07**
(b) What is a mobile IP? Explain discovery, registration and tunneling with mobile IP. **07**
- OR**
- (b) Describe protocol stack of Bluetooth **07**
- Q.3** (a) Explain GSM architecture **07**
(b) Write short note on: 1G, 2G, 2.5G and 3G mobile communications. **07**
- OR**
- Q.3** (a) What is Frequency Reuse? Explain Frequency Allocation in GSM. **07**
(b) Explain the value added services through SMS. **07**
- Q.4** (a) Draw GPRS System Architecture. Discuss GPRS network enhancement over GSM. **07**
(b) What is RFID? Differentiate active and passive RFID. **07**
- OR**
- Q.4** (a) Write a short note on WAP. **07**
(b) What is CDMA technology? Explain Direct Sequence Spread Spectrum **07**
- Q.5** (a) Explain WiFi and WiMax technology in detail. **07**
(b) Define Mobile Ad hoc Networks. Discuss its characteristics and limitations. **07**
- OR**
- Q.5** (a) What is Mobile VoIP? Explain **07**
(b) Explain Indirect TCP and Snooping TCP in detail. **07**
