

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (OLD) EXAMINATION – SUMMER 2019****Subject Code: 170702N****Date: 21/05/2019****Subject Name: Wireless Communication & Mobile Programming****Time: 02:30 PM TO 05:00 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 Three Tier Architecture of Mobile Computing. **07**
(b) Briefly describe the following networks with example and application **07**
1. Wired network
2. Wireless network
3. Ad hoc network
- Q.2** (a) Draw and explain the Bluetooth protocol stack. **07**
(b) Draw GPRS System Architecture. Discuss GPRS network enhancement over GSM. **07**
- OR**
- (b) What is Mobile IP? Explain tunneling in the context of Mobile IP **07**
- Q.3** (a) Explain wireless TCP and differentiate Indirect TCP, Snooping TCP and Mobile TCP. **07**
(b) Explain the handover procedure in GSM system. **07**
- OR**
- Q.3** (a) What is PDP Address? Explain PDP Context Activation in GPRS. **07**
(b) Explain SMMT and SMMO in SMS. **07**
- Q.4** (a) Write note on RFID security and Mobile Agent security. **07**
(b) Discuss GPRS specific applications along with limitations of GPRS. **07**
- OR**
- Q.4** (a) Discuss the WAP gateway for coding and encoding. **07**
(b) What is CDMA technology? Explain Direct Sequence Spread Spectrum. **07**
- Q.5** (a) Explain direct sequence spread spectrum **07**
(b) Explain Indirect TCP and Snooping TCP in detail. **07**
- OR**
- Q.5** (a) Explain H.323 framework for voice over IP. **07**
(b) Explain WiFi and WiMax technology in detail. **07**