

GUJARAT TECHNOLOGICAL UNIVERSITY**ME – SEMESTER – I (New)– EXAMINATION – WINTER-2019****Subject Code: 3712311****Date: 06-01-2020****Subject Name: Advanced Wireless and Mobile Networks****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) Draw diagram of GSM. **07**
(b) What is Multiplexing? Explain TDMA and FDMA. **07**
- Q.2** (a) What is Handover in GSM? Explain all cases of Handover. **07**
(b) Explain FHSS in detail. **07**
- OR**
- (b) Explain DSSS in detail. **07**
- Q.3** (a) Write a short note on SMS Service. **07**
(b) What is HLR? Explain role of HLR in GSM. **07**
- OR**
- Q.3** (a) Explain DHCP in detail. **07**
(b) Explain role of SGSN and GGSN in GPRS Network. **07**
- Q.4** (a) Explain AODV protocol with example. **07**
(b) Explain DSR protocol with example. **07**
- OR**
- Q.4** (a) Explain registration process in context of Mobile IP. **07**
(b) Draw and Explain Architecture of an infrastructure-based IEEE 802.11. **07**
- Q.5** (a) Explain snooping TCP. **07**
(b) What is mobile ad-hoc networks? Explain features of it. **07**
- OR**
- Q.5** (a) Explain Indirect TCP. **07**
(b) Enlist and explain characteristics which can be considered when deploying applications over 2.5G/3G wireless links. **07**
