

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII • EXAMINATION – WINTER 2013****Subject Code: 170702****Date: 05-12-2013****Subject Name: Mobile Computing****Time: 10:30 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) Define and explain following terms **06**
(1) Mobile Computing (2) Handover (3) Wireless Broadband
- (b) Answer the following **08**
1) Message oriented middleware (MOM)
2) Internet Content Adaption Protocol (ICAP)
- Q.2** (a) Draw and explain mobile computing architecture diagram. **07**
(b) How IVR is useful in real life? Explain its architecture. **07**
- OR**
- (b) What is Bluetooth? Elaborate Bluetooth protocol stack **07**
- Q.3** (a) Define RFID. Differentiate active and passive RFID with diagrams. **07**
(b) List and explain GSM entities. **07**
- OR**
- Q.3** (a) Draw and explain GSM architecture **07**
(b) How does the Mobile IP work? Explain its architecture. **07**
- Q.4** (a) Explain call routing for a mobile terminating call. **07**
(b) Explain WAE logical model. **07**
- OR**
- Q.4** (a) What is Walsh function? Explain it for CDMA orthogonal codes **07**
(b) What is DSSS? Explain CDMA chip sequence with example. **07**
- Q.5** Attempt ANY FOUR **14**
- (a) IPv6 Security
(b) WiMax
(c) Value added service through SMS
(d) Limitations of GPRS
(e) Ad hoc v/s Infrastructure mode for wireless architecture.
(f) MANET
(g) Wireless Transaction Protocol (WTP).
(h) Session Initiation Protocol (SIP).
