

**KADI SERVA VISHVAVIDHAYALA UNIVERSITY**  
**LDRP INSTITUTE OF TECHNOLOGY & RESEARCH GANDHINAGAR**  
**B.E. SEMESTER – VI (IT)**  
**MID-SEMESTER EXAM. Feb.-2015**

**SUB: Mobile Computing**

**Subject Code: IT601**

**Date: 27/02/2015**

**Time: 12.00 to 1.30 pm**

**Total Marks: 30**

- Instructions:** (1) Figure to the right indicates full marks.  
(2) Assume suitable additional data, if necessary.  
(3) Indicate clearly, the option you attempt along with its respective Question Number.

**Q.1**

- a) What is SMS? Describe various strengths of SMS & explain all of them. [5]
- b) Illustrate GPRS network Architecture. Describe what is the limitation of GPRS? [5]

**Q.2 Explain any Two.**

- a) Explain IEEE 802.16 standards define how wireless traffic will move between subscribers and core network. [5]
- b) Describe the GSM architecture and its different elements in this architecture. [5]
- c) Explain how does mobile IP work? What are the challenges with mobile IP with respect to high speed mobility? How does cellular IP solve some of these challenges? [5]

**Q.3 Explain any Two.**

- a) Explain about Bluetooth & its protocol. [5]
- b) What is active RFID? Describe two applications of active RFID. How is active RFID different from passive RFID? [5]
- c) Justification all of this below in short: [5]
  - 1) Tunneling
  - 2) Home agent
  - 3) Care-of address
  - 4) Home address
  - 5) Hand-off/roaming

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