

Registration No:

--	--	--	--	--	--	--	--	--	--

Total Number of Pages: 01

**M.TECH**  
**P2CTCC11**

**2<sup>nd</sup> Semester Regular Examination 2016-17**  
**MOBILE COMPUTING**

**BRANCH: COMPUTER ENGG, COMPUTER SCIENCE, COMPUTER SCIENCE AND ENGG, COMPUTER SCIENCE AND TECH., Information Tech Eng, INFORMATION TECH.**

**Time: 3 Hours**

**Max Marks: 100**

**Q.CODE: Z972**

**Answer Question No.1 which is compulsory and any FOUR from the rest.  
The figures in the right hand margin indicate marks.**

- Q1** Answer the following questions: *Short answer type* (2 x 10)
- a) What is scatternet in Bluetooth?
  - b) What is fixed channel allocation?
  - c) How does a mobile environment differ from a fixed network, when accessing databases?
  - d) What is the difference between Proactive and Reactive routing?
  - e) What is the difference between Home agent and foreign agent?
  - f) What is Care-of address?
  - g) What are the challenges in implementing mobile agent system?
  - h) What are the criteria for optimizing access to a data broadcast?
  - i) What are the advantages of mobile agents over conventional agents?
  - j) What is the effect of ordering multiple data items in a broadcast disk on latency?
- Q2** a) Describe functional architecture of a GSM system with diagram. (10)  
b) Describe Bluetooth protocol stack with diagram. (10)
- Q3** a) Explain agent discovery process in mobile-IP. (10)  
b) How tunneling and Encapsulation happens in mobile-IP, Describe. (10)
- Q4** a) Describe Dynamic source routing. (10)  
b) Why the routing in multihop adhoc networks is complicated? What are the special challenges? (10)
- Q5** a) Describe Snooping TCP. (10)  
b) Describe Wireless application protocol architecture with diagram. (10)
- Q6** a) Explain periodic broad cast. (10)  
b) Explain the naïve approach of data broadcasting and computation of expected delay with examples? (10)
- Q7** a) Explain the role of latency and tuning time when designing an indexing scheme. (10)  
b) What is (1,m) indexing.? (10)