## Model question paper

# **Seventh Semester B Tech Degree Examination**

## (2013 Scheme)

## 13.705.3 MOBILE COMPUTING (Elective I) (F)

Time: 3 Hours Marks: 100

### PART- A

Answer all questions. Each question carries 4 marks

- 1. List and explain GSM services.
- 2. What are the benefits of Spread Spectrum Systems?
- 3. Compare between IEEE 801.11 and HiperLAN2.
- 4. Explain agent advertisement in Mobile IP.
- 5. Why has a scripting language been added to WML? How can this language help saving bandwidth and reducing delay?

#### PART-B

Answer any one question from each module. Each question carries 20 marks.

# Module 1

- 6 a) Explain differences between GSM, GPRS and UMTS. (10)
- b) Draw a neat diagram of GSM architecture and explain with details of various types of interfaces. (10)

or

- 7 a) Explain various types of antennas and their radiation pattern. (8)
  - b) What are the main problems faced in signal propagation? (12)

#### Module 2

8 a) Explain Bluetooth protocol stack with neat diagram (12)

b) Explain in detail about digital video broadcasting. (8)					
or					
9 a) Explain how the power management is done in IEE 802.11 infrastructure and adhoc networks. (10)					
b) Describe the mobile satellite systems (LEO,GEO and MEO). (10)					
Module 3					
10 a) What is the basic purpose of DHCP? Name the entities of DHCP. (10)					
b) Explain standard routing protocols for mobile communication. (10)					
or					
11 a) List the various entities of mobile IP and describe data transfer from a mobile node to a fixed node and vice versa. (10)					
b) Explain the various encapsulation methods used in Mobile IP. (10)					
Module 4					
12 a) Draw a neat diagram of WAP architecture and explain in detail. (10)					
b) Explain how mobile TCP improves the TCP performance in wireless and mobile environment. (10)					
or					
13 Explain					
a) WAP 2.0 (5)					
b) WML Script (5)					
c) WDP (5)					
d) WTLS (5)					