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10CS/IS831

**Eighth Semester B.E. Degree Examination, Dec.2016/Jan.2017**  
**Wireless Network and Mobile Computing**

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting  
at least TWO questions from each part.**

**PART – A**

- 1 a. With neat diagram, explain three tier architecture for mobile computing. (12 Marks)  
b. Discuss the role of “client context manager” in detail. (08 Marks)
- 2 a. Draw a neat block diagram of GSM architecture. Explain the network and switching subsystem of GSM. (10 Marks)  
b. What are the unique characteristics of SMS? (06 Marks)  
c. Discuss SMS Architecture. (04 Marks)
- 3 a. Explain two types of support nodes used in GPRS network Architecture. (06 Marks)  
b. Explain any four GPRS specific Applications. (08 Marks)  
c. What are the limitations of GPRS? (06 Marks)
- 4 a. What are different spreads – spectrum spreading techniques? Explain any two in details. (06 Marks)  
b. With neat diagram explain Cdma One Architecture. (10 Marks)  
c. What are the attractive sets of services offered by UMTS? (04 Marks)

**PART – B**

- 5 a. What are the different designs constrains in applications for hand held devices? (10 Marks)  
b. With a block diagram explain How mobile IP works. (10 Marks)
- 6 a. With neat diagram explain smart client Architecture. (10Marks)  
b. Explain the different phases involved in designing a successful mobile solutions. (10 Marks)
- 7 a. What are different stages of a wireless internet request? (10 Marks)  
b. What are different security considerations in MIDP? (06 Marks)  
c. Explain any four key benefits of WAP? (04 Marks)
- 8 Write a short notes on the following :  
a. Handheld Device Markup Language (HDML)  
b. Wireless Markup Language (WML)  
c. Compact HTML (CHTML)  
d. Third generation Networks. (20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.