

(FULLTIME)  
B.E DEGREE EXAMINATIONS-APRIL 2019

IT8603-MOBILE COMPUTING  
(Regulations 2012)

Time: 3Hrs

(Answer all questions)

Max.Marks: 100

PART A (10\*2=20 MARKS)

1. State the characteristics of Spread Spectrum.
2. List out the different types of antenna available for wireless propagation.
3. Define Handover in wireless.
4. How much of the original GSM network does GPRS need? Which elements of the network perform the data transfer?
5. Compare proactive and reactive routing protocol?
6. State the significance of Snoop TCP.
7. List down the various features of a smart phone.
8. What is the significance of Palm OS?
9. What do you meant by location aware mobile computing?
10. How VoiceXML differs from XML?

PART B (5\*16=~~70~~<sup>80</sup> MARKS)

11. i. Explain the countermeasures for interference in SDMA, TDMA, FDMA and CDMA systems. (6)  
ii. Discuss in detail about the characteristics and operations of a Typical cellular network. (10)
  12. a) i. Explain the GSM handover schemes and state the reasons for their occurrence. (8)  
ii. Draw the GPRS system architecture and explain any one of its subsystem in detail. (8)
- (Or)
- b) How is synchronization achieved in GSM and why it is important? How system security is maintained in GSM? (16)



13. a) i. Explain in detail about the mobility features of IPv6. (8)  
ii. Explain in detail about the limitations of traditional TCP for wireless networks. (8)

(Or)

- b) Discuss in detail about security issues in transport and network layer. (16)
14. a) i. Explain in detail about the device characteristics and software capabilities of a PDA device. (8)  
ii. Discuss in detail about issues in android application development. (8)

(Or)

- b) i. Discuss in detail about the significance of mobile operating systems. (10)  
ii. Write a note on J2ME. (6)
15. a) Discuss in detail about servlets and web service communication with suitable example. (16)

(Or)

- b) i. Explain in detail about IP Multimedia subsystem. (12)  
ii. Write a note on WAP Gateway.. (4)

