

**B.TECH SEM – VIII (2007 COURSE) (COMPUTER ENGG.) :
WINTER - 2017**

SUBJECT : WIRELESS DATA NETWORKS

Day : **Tuesday**
Date : **21/11/2017**

W-2017-2660

02.30 PM TO 05.30 PM
Time :
Max. Marks : 80.

N.B.:

- 1) Q. No. 1 and Q. No. 5 are **COMPULSORY**. Out of remaining attempt any **TWO** questions from Section-I and any **TWO** questions from Section-II
- 2) Section-I and Section-II should be written in **SEPARATE** answer book.
- 3) Figures to the right indicate **FULL** marks.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.
- 5) Assume suitable data, if necessary.

SECTION-I

- Q.1 a)** Explain the concept of Frequency Reuse in Wide Area Cellular Networks. **(08)**
- b)** Describe the wireless spectrum with a neat diagram. **(06)**
- Q.2 a)** Compare the Broadband Wireless Access (BWA) Networks with other types of broadband networks used today with respect to their data rates, bandwidth and security. **(07)**
- b)** Describe Bluetooth Architecture with neat diagram. **(06)**
- Q.3 a)** Give an overview of IEEE 802.15 WPAN. **(07)**
- b)** Discuss in brief about the various applications of Wireless LANs. **(06)**
- Q.4 a)** Explain Routing and Handover Mechanism in a typical Satellite system. **(07)**
- b)** Discuss the advantages and disadvantages of Wireless Local Loop (WLL). **(06)**

SECTION-II

- Q.5 a)** Differentiate between Forward channel and Reverse channel in W-CDMA. **(08)**
- b)** Give an overview of Short Messaging Service in GPRS mobile application protocols. **(06)**
- Q.6 a)** Explain Mobile IP Data Encapsulation and tunneling. **(07)**
- b)** Differentiate between Snooping TCP and Mobile TCP. **(06)**
- Q.7 a)** Describe UMTS system Architecture with a neat diagram. **(07)**
- b)** Give an overview of several enhancements made to the network layer to support mobility. **(06)**
- Q.8 a)** Differentiate between GSM and UMTS systems. **(07)**
- b)** Explain in brief about LTE Protocol Stack Layers. **(06)**

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