



Uva Wellassa University of Sri Lanka
Faculty of Science & Technology
Department of Computer Science and Technology
1st Semester Examination March/April 2013
CST443-1 Wireless Communication Systems



Instructions for candidates:

Answer **all four (04)** questions.

Time Duration: **One (01) hour.**

Total marks: **100**

Each question carries equal marks.

1.
 - a) Define the term Wireless Network.
 - b) Describe Wireless technologies 802.11g,802.11b,802.11n with the consideration of topics:
 - i. Frequency
 - ii. Data rates
 - c) Explain
 - i. Address Resolution protocol (ARP).
 - ii. Reverse Address Resolution Protocol (RARP).
 - d) What are the two sub layers of data link layer?
 - e) What is CSMA/CD?
2.
 - a) List three (3) WLAN Topologies and describe them.
 - b) List two goals of Wireless Application Protocol.
 - c) State 2 disadvantages of WAP.
 - d) List 3 Applications of WAP.
 - e) What is Imode?
3.
 - a) What is Bluetooth?
 - b) Describe Two (2) characteristics of Bluetooth Technology.
 - c) Briefly describe functionality of PICONET and SCATTERNET.
 - d) List Two (2) Bluetooth link types and describe.
 - e) List two (2) Usages of wireless sensor networks and briefly describe.

4.

- a) What is ZigBEE? Describe
- b) State four (4) Advantages of ZigBEE Technology.
- c) Describe one (1) application of ZigBEE Technology.
- d) A symmetric 1-slot link between the master and slave carries 216 bits per slot at a rate of 800 slots per second in each direction. What is the associated rate (kbps)?