

R09

Code: 9A05807

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations, July 2013

WIRELESS SENSOR NETWORKS

(Common to CSE, IT and CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) With a neat diagram, explain the functions of each layer of Bluetooth.
(b) State the differences between infrastructure and adhoc networks.
- 2 (a) Elaborate on hidden and exposed terminal problem in wireless environment.
(b) Explain the counter measures for interference using SDMA and FDMA multiplexing techniques.
- 3 Discuss the importance of location management and handover management in mobile IP.
- 4 How indirect TCP, snooping TCP and mobile TCP isolate the problems on the wireless link? Also mention the drawbacks of these solutions.
- 5 (a) Discuss the issues and challenges in the design of a sensor network.
(b) List the scenarios where sensor networks can be used.
- 6 (a) Explain about multipath based and query based routing protocols for wireless sensor networks.
(b) Discuss about high-level application layer support for wireless sensor networks.
- 7 Explain about various components of sensor network hardware.
- 8 (a) Distinguish between cycle driven and discrete event simulators.
(b) Describe the features of Tinyos.
