Code: 17D08201

M.Tech II Semester Supplementary Examinations January/February 2019
WIRELESS SENSOR NETWORKS
(Computer Networks)
(For students admitted in 2017 only)

Time: 3 hours   Max. Marks: 60

Answer all the questions
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1 (a) What are the important issues to wireless sensor networks?
   (b) List and explain the two categories of sensor networks.
OR
2   Draw and explain the components of a typical sensing node.

3   Draw and explain the five basic software subsystems of wireless networks.
OR
4 (a) List and explain the three basic physical mechanisms affect the radio transmission.
   (b) Explain in detail about the 3G cellular network.

5   Describe the performance requirements of the MAC protocols.
OR
6 (a) Explain about the Hidden and Exposed node problem in wireless environment.
   (b) List and explain the routing challenges in wireless sensor networks.

7   Describe the general middleware architecture for wireless sensor networks with a neat diagram.
OR
8 (a) What are the design issues of transport protocols in wireless sensor networks?
   (b) Explain in detail about the AMF (Adaptive Middleware Framework).

9 (a) Explain the management architecture MANNA for WSNs.
   (b) Discuss briefly about the design issues of operating system.
OR
10 (a) Describe the naming issues related to network management.
   (b) Write a short note on MagnetOS operating system.

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