

ME Sem I [CNIS] choice based  
May 2017

Q.P. Code : 827200

(3 Hours)

[ Total Marks : 80

- N.B. :** (1) Question number 1 is compulsory.  
 (2) **Attempt** any **three** questions out of the remaining five questions.  
 (3) **Figures** to the right indicate **full** marks.  
 (4) Assume suitable data whenever required and justify them.

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|----|----|---|----|
| 1. | a) | State and explain the different issues in Ad-hoc wireless networks.         | 10 |
|    | b) | Explain the Multi-channel MAC & Power control MAC protocol.                 | 10 |
| 2. | a) | Explain how heterogeneous mesh network differs from vehicular mesh network. | 10 |
|    | b) | Differentiate ad-hoc TCP and split TCP.                                     | 10 |
| 3. | a) | What are the effects of exposed terminal problem in wireless networks?      | 10 |
|    | b) | What is meant by OLSR and explain about OLSR routing protocol?              | 10 |
| 4. | a) | Explain tree based and mesh based Ad-hoc network routing.                   | 10 |
|    | b) | Write short note on different operational states of transceiver in WSN.     | 10 |
| 5. | a) | Explain how routing in ad-hoc and sensor network is more secure?            | 10 |
|    | b) | Explain issues and challenges in providing QoS in ad-hoc wireless networks. | 10 |
| 6. | a) | Explain about the localization in WSN.                                      | 10 |
|    | b) | Explain Hybrid TDMA/FDMA.   | 10 |