**Reg. No. :** | | | | | | | | | | |

# Question Paper Code: S31481

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Elective

Electronics and Communication Engineering

01UEC902 - MOBILE AD-HOC NETWORKS

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define indoor propagation model.
2. List the characteristics of wireless channels.
3. Classify the types of protocols used to handle multiple access issues?
4. Show the frame format of IEEE 802.11 physical layer using FHSS.
5. Compare proactive and reactive routing protocols.
6. Where is network layer solution used for QoS.
7. Define security routing.
8. Deduce some issues in designing transport layer protocol.
9. Summarize the factors that affect effective cross layer design.
10. Define cross layer feedback and mention its categories.

PART - B (5 x 16 = 80 Marks)

11. (a) Discuss about the issues in designing ad-hoc wireless networks. (16)

Or

(b) Explain ad-hoc indoor mobility models in detail. (16)

12. (a) Explain contention based protocols with reservation mechanisms in detail. (16)

Or

(b) Explain IEEE 802.11g standard in detail. (16)

13. (a) Illustrate table driven routing protocol with an example. (16)

Or

(b) Explain multicast routing algorithm in detail. (16)

14. (a) (i) Explain the issues in designing a transport layer protocol for ad-hoc wireless networks. (8)

(ii) Discuss why does TCP not perform well in ad-hoc wireless network? (8)

Or

(b) List and brief various network and transport layer attacks in detail. (16)

15. (a) Discuss briefly cross layer optimization technique in detail. (16)

Or

(b) Explain integration of ad-hoc with mobile IP networks in detail. (16)

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