C.U.SHAH UNIVERSITY
Winter Examination-2018

Subject Name: Mobile Ad-Hoc Networks

Subject Code: 4TE07MAN1   **Branch: B.Tech (EC)**

Semester: 7   **Date: 06/12/2018**   **Time: 10:30 To 01:30**   **Marks :70**

Instructions:
  (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  (2) Instructions written on main answer book are strictly to be obeyed.
  (3) Draw neat diagrams and figures (if necessary) at right places.
  (4) Assume suitable data if needed.

Q-1   **Define Following Terms:**   **(14)**
  (a)   Energy management
  (b)   Neighbor Table
  (c)   Scalability
  (d)   Tier Table
  (e)   Gateway
  (f)   Link state routing protocol
  (g)   Hybrid routing protocol
  (h)   Cross layer feedback
  (i)   Ad-Hoc Network.
  (j)   Passive attacks
  (k)   Byzantine attack
  (l)   Multicast
  (m)   Active attacks
  (n)   Transport Layer

Attempt any four questions from Q-2 to Q-8

Q-2   **Attempt all questions**   **(14)**
  (a)   Explain in detail with diagram architecture of PRNETs.
  (b)   Explain the applications areas of ad hoc networks in detail.

Q-3   **Attempt all questions**   **(14)**
  (a)   Explain in brief major issues to be considered in designing a MAC protocol for ad hoc wireless networks.
  (b)   Write short notes on "Quality of Service Provisioning"

Q-4   **Attempt all questions**   **(14)**
  (a)   Explain the major issues in designing multicast routing protocols.

(b) Classify security attacks in ad hoc wireless networks. Explain in brief each of them.

Q-5   **Attempt all questions**   **(14)**
   (a) Explain in detail Random Walk indoor mobility model
   (b) Explain Collision Avoidance Time Allocation Protocol (CATA) with frame format.

Q-6   **Attempt all questions**   **(14)**
   (a) State the different table driven routing protocols. Explain in detail with diagrams DSDV routing protocol.
   (b) Explain Cluster-Head Gateway Switch Routing Protocol (CGSR) with necessary figure.

Q-7   **Attempt all questions**   **(14)**
   (a) Classify routing protocols with efficient flooding mechanisms. Explain in detail PLBR routing protocols.
   (b) Explain in detail HSR hierarchical routing protocols.

Q-8   **Attempt all questions**   **(14)**
   (a) Discuss briefly the reasons why TCP does not perform well in ad hoc wireless network
   (b) What is Cross layer Design? Explain the Need for cross layer design.