

**School of ICT**

**Department of Information Technology**

**Module Title: Wireless Networks**

**Assignment, to be submitted on Friday 1st Feb 2019**

**Maximum Marks = 40 marks, Date: 18th Jan 2019**

1. Describe various advantages and disadvantages of wireless networks and highlight their different applications **/10 marks**
2. With respect to Wireless communications, what is the meaning of Wireless Local Area Network (WLAN/IEEE 802.11?) protocol standard and what are its design goals with respect to wired networks? **/10 marks**
3. Explain the difference between IEEE 802.11 and IEEE 802.15.1 Protocol standards for wireless communications. **/4 marks**
4. With the help of a diagram show how components are interconnected in an Ad hoc and Infrastructure mode in WLAN/ IEEE 802.11 protocol standard, and state the role of each component in the diagram. **/6 marks**
5. With the help of illustrations, describe the “Hidden” and “Exposed” node problems seen in wireless communications. **/10 marks**