

COURSE CODE: DCAP 607
COURSE TITLE: Wireless Networks

Date: 26-Sep-2013
Time Allowed: 3 hours

Time: 09:30-12:30
Max. Marks: 80

1. This paper contains 10 questions divided in two parts on 1 page.
2. **Part A is compulsory.**
3. **In Part B (Questions 2 to 10), attempt any 6 questions out of 9. Attempt all parts of the selected question.**
4. The marks assigned to each question are shown at the end of each question in square brackets.
5. Answer all questions in serial order.
6. **The student is required to attempt the question paper in English medium only.**

PART-A

- Q1. a) Why is WEP not acceptable for protecting sensitive information? [2]
b) Which generation of cellular systems offers data rates up to 2 Mbps? [2]
c) What are examples of semidirectional antennae? [2]
d) What is a distinguishing attribute of a wireless network as compared to a general wireless communication system? [2]
e) What type of weather impacts RF signals the most? [2]
f) What are the advantages of using packet radio for wireless MANs? [2]
g) When would the use of a wireless LAN repeater make sense? [2]
h) Which IEEE standards group uses Bluetooth as the basis for the standard? [2]
i) On what layers of the OSI reference model do wireless networks operate? [2]
j) What are examples of applications for wireless WANs? [2]

PART- B

- Q2. Modulation creates a radio or light signal from the network data so that it is suitable for propagation through the air. Give your comment to support the statement and describe the methods use used for modulation? [10]
- Q3. 802.11 and HiperLAN/2 are the most common standards for wireless LANs. Examine each of these standards. [10]
- Q4. Components of a wireless MAN generally come in matching pairs because they support fixed wireless connectivity from one point to another. Discuss the primary components of a wireless MAN. [10]
- Q5. Wireless WANs make use of technologies that focus on modulation of voice and data. Mention the various modulation techniques used in Wireless Technology. [10]
- Q6. Describe the various forms of security threats to wireless networks. [10]
- Q7. Specific functions related to the transfer of information, such as medium access and error control, are common across the various types of wireless networks. Justify this statement. [10]
- Q8. Wireless MANs offer connections between buildings and users within a city or campus area through several system configurations. Mention the various methods/ techniques used to send from one point to another. [10]
- Q9. Discuss Layers of the OSI Reference Model Represent All Functions of a Network. Wireless work at which layer? [10]
- Q10. What are the different generation of Cellular Network. [10]