

Student Regd. No

COURSE CODE: DCAP607
COURSE TITLE: WIRELESS NETWORK

Date of Exam: 5 March
Time Allowed: 3 hours

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

1. *This paper contains 10 questions divided in two parts on 2 pages.*
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 questions chosen.**
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. What types of information does a wireless network support?
- b. Why do wireless WANs not effectively satisfy requirements for indoor wireless networks?
- c. Explain how the ARQ form of error control works.
- d. Why does interference cause errors in wireless networks? What are sources of RF interference?
- e. What is the general maximum coverage area of a wireless PAN?
- f. What is the primary difference between an access point and a wireless LAN router?
- g. How does a wireless LAN radio NIC identify with which access point to associate?
- h. What is the primary difference between a bridge and an access point?
- i. In regards to beamwidth, what is the primary difference between a semidirectional and highly directional antenna?
- j. What is an advantage of a satellite system? (10x2=20)

PART- B

- Q2. Differentiate between wireless PAN, LAN, MAN and WAN on the basis of coverage, performance, standards and applications?
- Q3. Explain in detail the benefits of wireless networks?
- Q4. Explain in detail the components of wireless network?
- Q5. Explain in detail the components of wireless PAN?
- Q6. Could Bluetooth replace wireless LAN? Could wireless LAN replace Bluetooth? Justify your answers with examples.
- Q7. Explain with reference to MAN:
- I. Point to point system.

II. Point to multipoint system.

III. Packet radio system.

Q8. Explain in detail wireless MAN and wireless WAN technologies?

Q9. Explain various security threats to wireless network.

Q10. For a given wireless network what policies would you follow to provide security to the network?
(6x10=60)