

Exam.Code:0924  
Sub. Code: 6851

1019  
B. E. (Information Technology)  
Sixth Semester  
ITE-641: Wireless Communication

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Explain the following:-
  - a) 3G Communication
  - b) Advantage of CDMA
  - c) Need of Frequency reuse
  - d) Mobile communication
  - e) Use of Rake Receiver
  - f) Cell breathing
  - g) Near Far Effect
  - h) Channel equalization
  - i) Application of WSN
  - j) Interleaving

(10x1)

UNIT - I

- II. Explain evolution of Mobile communication systems. Also explain the architecture of 4G communication system. (10)
- III. Explain cell splitting and cell sectoring for coverage in cellular systems. (10)
- IV. With the help of diagram explain GSM architecture and relating to this also explain authentication and security services. (10)

UNIT - II

- V. Explain mobile data over CDMA and how CDMA differs from GSM. (10)
- VI. Explain various mitigation techniques with the help of diagram. (10)

P.T.O.

(2)

VII. Explain the following technologies and advantages:-

- a) WiFi
- b) WiMax
- c) WSN
- d) LTE

(10)

x-x-x