

Code No:2420401

SET- 1

IV B. Tech II Semester Regular Examinations, April/May 2009

WIRELESS COMMUNICATIONS & NETWORKS

(Common to E.C.E, E.Con.E)

Time: 3 Hours

Max. Marks 80

Answer any FIVE questions
All questions carry equal marks

1. a) Distinguish between TDMA and FDMA with a neat sketch bringing out salient Features.
b) Discuss the CSMA protocols. 8m+8m

2. a) Discuss the development of 3rd generation wireless networks
b) Explain packet switching with necessary data formats. 8m+8m

3. a) Explain the most commonly used interface in ISDN with a neat block diagram.
b) Explain SSM protocol architecture with a neat block schematic 8m+8m

4. a) Discuss the important capabilities of WML scripts 8m
b) Draw the programming model for WAP and explain its functioning 8m

5. a) Discuss the application of wireless LAN. 6m
b) Describe the function of each layer of protocol with a neat IEEE 802 architecture diagram 10m

6. a) Draw the BLUE TOOTH architecture and explain the working of each layer
b) Discuss about BLUE TOOTH usage models 8m+8m

7. a) Draw the CDPD architecture and explain its functions. 8m +8m
b) Give the overview of SMS operation in GSM with necessary protocols architecture

8. a) what is wireless ATM ? Discuss the WATM entities with a neat diagram. 8m
b) what is Hiper LAN explain with neat adhoc network architecture 8m

SET- 2

Code No:2420401

IV B. Tech II Semester Regular Examinations, April/May 2009

WIRELESS COMMUNICATIONS & NETWORKS

(Common to E.C.E, E.Con.E)

Time: 3 Hours

Max. Marks 80

**Answer any FIVE questions
All questions carry equal marks**

1. a) Explain FDMA with its salient Features, emphasizing the non linear effects in FDMA 8m
b) Distinguish between pure ALOHA and slotted ALOHA in terms of maximum throughput. 8m.

2. a) Distinguish between wireless and fixed telephone Networks. 6m
b) Discuss the development of 2nd generation wireless networks 10m

3. a) Draw the network diagram CDPD and discuss the function of each block. 8m
b) Discuss the networks services part (NSP) of SS7 with a neat protocol architecture

4. a) Explain the operation of mobile IP. 8m
b) Write short notes on wireless datagram protocol. 8m

5. a) Mention the different categories wireless LAN and discuss the transmission techniques of IR LANS with a neat diagrams 10m
b) Draw the protocol architecture of LAN and Compare it with OSI model. 6m

6. a) Discuss the adaptation protocols of BLUE TOOTH. 10m
b) Mention the radio specification of BLUE TOOTH. 6m

7. a) Discuss the short message schemes in GSM 8m
b) Explain how the mobility support is achieved in GPRS with a neat schematic 8m

8. a) Discuss the reference model of WATM network. 8m
b) what is Home RF explain with overall architecture diagram 8m

Code No:2420401

SET- 3

IV B. Tech II Semester Regular Examinations, April/May 2009
WIRELESS COMMUNICATIONS & NETWORKS
(Common to E.C.E, E.Con.E)

Time: 3 Hours

Max. Marks 80

Answer any FIVE questions
All questions carry equal marks

1. a) Explain in detail about SDMA, bringing out the salient features.
b) Explain different protocols used in packet radio 8m+8m
2. a) Distinguish between packet switching and circuit switching with necessary data Formats. 10m
b) Explain about signaling between mobile, base station and MSC in 1st generation networks with neat diagram 6m
3. a) Explain the functioning of ISDN networks with a neat block schematic 8m
b) Draw the block diagram of ISDN and explain two interfaces used in the network 8m
4. a) Draw the general scenario of mobile IP and explain its functioning. 8m
b) Discuss wireless datagram protocols with salient features. 8m
5. a) State the requirements of wireless LAN? Explain and discuss the transmission issues in spread spectrum LANs 10m
b) Write short notes on "IEEE 802.11 services" 6m
6. a) Discuss the three error correction schemes that are used in BLUE TOOTH 8m
b) Write short notes on BLUE TOOTH usage model 8m
7. a) Explain the short message services in GSM 8m
b) Write short notes on "mobile application protocol" 8m
8. a) Draw the basic architecture of a WATM network and discuss the protocol entities in WATM 10m
b) Write short notes on "WPAN" 6m

Code No: 2420401

SET- 4

IV B. Tech II Semester Regular Examinations, April/May 2009
WIRELESS COMMUNICATIONS & NETWORKS
(Common to E.C.E, E.Con.E)

Time: 3 Hours

Max. Marks 80

Answer any FIVE questions
All questions carry equal marks

1. (a) Explain the salient features of FDMA with a neat diagram.
(b) What is packet radio? Explain slotted ALOHA and pure ALOHA with a neat sketches.
2. (a) Discuss the limitations in wireless networking.
(b) Discuss the development of 1st Generation networks.
3. (a) Write short notes on RAM Mobile Data (RMD).
(b) Distinguish between ISDN, BISDN and ATM with necessary figures.
4. (a) Discuss the Tunneling in Mobile IP.
(b) Discuss the salient features of WML scripts.
5. (a) Explain the transmission techniques that are used in infrared LAN.
(b) Write short notes on “IEEE 802 services”
6. (a) Explain the logic link control in BLUE tooth.
(b) Discuss “WLL Technologies”
7. (a) Draw the GPRS architecture and discuss the location and Hand off management procedures with necessary diagrams.
(b) Discuss the mobility management in CDPD.
8. (a) Discuss the protocol entries in wireless ATM.
(b) Write short notes on Hiper LAN.