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322849(22)

APR-MAY 2022

B. E. (Eighth Semester) Examination, ~~2020~~

(New Scheme)

(CSE Engg. Branch)

WIRELESS NETWORKS

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : *Attempt all questions. Part (a) is compulsory. Attempt any two parts of three i.e. (b), (c) and (d).*

1. (a) What is Channel Model? 2

   (b) Define Wireless Communication Network. Also explain the generations of wireless communication standard. 7

(c) Write short technical notes : 7

(i) Multipath propagation

(ii) Coverage extension

(d) What is channel correlation function? Also explain large scale path loss & shadowing. 7

2. (a) What is OFDA? 2

(b) What is Digital Modulation? Explain MPSK, MSK and GMSK. 7

(c) What is Power Spectral Density? Explain probability of Transmission Error. 7

(d) Write short technical notes : 7

(i) Signal space

(ii) Decision region

3. (a) What is Sectoring? 2

(b) Explain in detail about Cell Cluster. 7

(c) Explain in detail about co-channel & adjacent channel interference. 7

(d) Write short technical notes : 7

(i) Frequency reuse

(ii) Mobility management

4. (a) What is Traffic Calculation? 2

(b) What is Mobility Management and In wireless network? Explain. 7

(c) What is Handoff Management & also explain location management for cellular network & PCS network? 7

(d) Write short technical notes : 7

(i) Multiple Access Technique

(ii) Carrier Sense Multiple Access (CSMA)

5. (a) What are the entities of Mobile IP? 2

(b) Differentiate an adhoc network and a cellular network with respect to : 7

(i) Bandwidth usage

(ii) Cost effectiveness

(c) Explain the Mobile IP session intiation protocol for IP Pocket delivery in Mobile IP Networks. 7

(d) Explain with neat diagram and example the destination sequence distance vector routing algorithm of Adhoc Network. 7