Time: 3 Hours

Max. Marks:60

Instructions:
1. It is compulsory to answer all the questions (2 marks each) of Part -A in short.
2. Answer any four questions from Part -B in detail.
3. Different sub-parts of a question are to be attempted adjacent to each other.

PART -A

Q1 (a) What is difference between user mobility and device mobility? (2)

(b) Explain the need of spread spectrum? (2)

(c) Draw the cell structure for frequency reuse factor N=7? (2)

(d) List out various problems of signal propagation? (2)

(e) Differentiate between MEO and LEO in satellite communication? (2)

(f) What is the main physical reason for the failure of many MAC schemes known from wired networks? (2)

(g) Explain various steps performed during call delivery? (2)

(h) Differentiate between cell sectoring and cell splitting? (2)

(i) Differentiate between inter BSC and inter MSC handoff? (2)

(j) Explain near and far terminal problems? (2)

PART –B

Q2 (a) Differentiate between co-channel interference and adjacent channel interference? (5)

(b) Explain the steps through which capacity of a system can be enhanced in cell structure environment? (5)

Q3 Name main elements of GSM system architecture and describe their functions? (10) Which type of different services does GSM offer? Give some examples and reasons why these services have been separated?

Q4 (a) What are the advantages and problems of forwarding mechanisms in Bluetooth networks? (5)

(b) Explain in detail protocol architecture of IEEE 802.11. (5)

Q5 Explain in detail various multiple access techniques with the help of examples? (10)

Q6 (a) Differentiate between table driven and on demand adhoc routing protocols? (5)

(b) Differentiate between direct routing and indirect routing in MoPbile IP? (5)

Q7 Write short note on (10)
(a) Indirect TCP and Snooping TCP
(b) Differentiate between infrared and radio transmission

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