QP Code : 15398

[Revised Course]

3 Hours

[Total Marks – 100]

NB: 1) Question no. 1 is **compulsory**
2) Attempt **any four** questions out of the remaining six questions.
3) Figures to the right indicate full marks.
4) Assume suitable **data** wherever necessary.

[20]

Q 1 a) Explain HSCSD network.
b) Explain what Doppler shift is.
c) Explain authentication in GSM.
d) Explain path loss model.

[10]

Q 2 a) Discuss in detail GMS *GSM* logical channels.
b) How **system coverage and capacity** can be improved in GSM ?

[10]

Q 3 a) Discuss IMT 2000 system.   [10]
b) Explain IS-95 reverse traffic channel.

[10]

Q 4 a) Explain GSM services and features.   [10]
b) Elaborate on forward W-CDMA channel.

[10]

Q 5 a) Explain signal processing in GSM   [10]
b) What are the technical differences in W-CDMA and CDMA 2000.

[10]

Q 6 a) Explain GSM system architecture.   [10]
b) Explain in detail working of RAKE receiver.

[20]

Q 7 Write short notes (any two)
a) Small scale fading.
b) Frequency reuse.
c) GPRS technology.

correction Attached