

Lib.

BE (Comp) VII
Mobile Computing

04/06/09

11-2 P.M.

VR-4749

(3 Hours)

[Total Marks : 100

- N.B. :** (1) Attempt any **five** questions out of given **seven** questions.
(2) Assume **suitable** data wherever **required**.

1. (a) With neat diagram, explain 'Bluetooth Protocol Stack.' 10
(b) Explain what is spread spectrum ? How spreading can be achieved ? What are the merits of spread spectrum technique ? 10
2. (a) Differentiate between :- 10
(i) FDMA and TDMA
(ii) CDMA and GSM.
(b) Describe various modulation techniques used in mobile communication. 10
3. (a) Explain different methods to increase the capacity of GSM mobile system. 10
(b) What is 'near far problem' in CDMA system ? 5
(c) What do you mean by frequency reuse concept ? 5
4. (a) Draw the architecture of GSM mobile system and explain each block. 10
(b) Explain in detail IEEE 802.11 protocol architecture. 10
5. (a) What are the advantages of reservation scheme ? How collisions are avoided during data transmission ? 10
(b) Explain various handover techniques in mobile system. 10
6. (a) Compare Digital Audio Broadcasting with Digital Video Broadcasting. 10
(b) Explain GPRS architectural reference model and show the protocol architecture of the transmission plane for GPRS. 10
7. Write a short notes on (any two) :- 20
(a) WML
(b) DECT
(c) Routing Protocols in Ad-hoc Networks
(d) WATM Networks.