Code No: D6102, D3804, D7004, D6502 **R09**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech II - Semester Examinations, March 2011
WIRELESS COMMUNICATIONS AND NETWORKS
(COMMON TO COMMUNICATION SYSTEMS, DIGITAL ELECTRONICS & COMMUNICATION SYSTEMS, ELECTRONICS & COMMUNICATION, WIRELESS & MOBILE COMMUNICATIONS)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks
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1. Explain in detail the 1^{st}, 2^{nd} & 3^{rd} generation networks and their specification and standards of wireless communication. [12]

2. a) Briefly explain the various packet radio protocols.
   b) Discuss the following multiple access technique.
   i)TCDMA ii) FCDMA. [12]

3. a) Draw and explain the block diagram of cellular radio network.
   b) Draw and explain the protocol stack of SS7. [12]

4. Explain the services offered by WSP in detail. [12]

5. a) Explain the functions of DCF sub layer in IEEE 802.11.
   b) Discuss the various fields of MAC frame in detail. [12]

6. a) Write a short notes Piconets and Scaternets.
   b) Discuss the various logical channels of Bluetooth. [12]

7. a) With a neat diagram explain the mobility in GPRS.
   b) List and discuss the features of SMS. [12]

8. Explain the architecture of wireless ATM. [12]

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