

**R09****Code: 9A04806**

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations June/July 2016

**WIRELESS COMMUNICATIONS & NETWORKS**

(Common to ECE &amp; ECC)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

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- 1 (a) Explain about SDMA and carrier sense multiple access protocols (CSMA).  
(b) Consider global system for mobile which is TDMA/FDD system that uses 25 MHz for the forward link, which is broken into radio channels of 200 kHz. If 8-speech channels are supported on single radio channel and no guard band is assumed, find the number of users accommodated in GSM.
- 2 (a) Explain about the second generation cellular radio network.  
(b) Discuss about the Hierarchy X-25 in OSI model and differences between the circuit switching and packet switching.
- 3 (a) Discuss about SS7 protocol architecture and functional diagram of message transfer part.  
(b) Write about the ATM and ISDN.
- 4 (a) Discuss about the wireless datagram protocol.  
(b) Explain about the concept of registration, tunneling in wireless access protocol.
- 5 (a) Explain about IEEE 802 architecture and services.  
(b) Discuss about 802.11 physical layers.
- 6 (a) Discuss in detail about the logical link control.  
(b) Explain about the adaption protocol.
- 7 (a) Explain about the general packet radio services (GPRS) in detail.  
(b) Explain about data oriented CDPD network.
- 8 (a) Briefly explain about wireless ATM.  
(b) Explain about wireless personal are network (PAN).

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