

**End Semester Examinations - 2015-16 Even Semester - May 2016**

**14EC2038 Cellular Mobile Communication**

**Set A**

**Time : 3 hrs**  
**Total Marks: 100**

1. a. Give short notes on the advantages and disadvantages of micro cells in a cellular system? (5)  
b. Explain in detail about various multiplexing techniques? (10)  
c. Comprehend on the various effects of signal propagation? (5)  

**OR**
2. a. Define interference? Explain the various types. (10)  
b. With a neat and suitable diagram explain the spread spectrum multiple access techniques. (10)
3. a. How do you increase the system capacity in the cellular mobile networks? Explain. (10)  
b. Give an account on the various channel assignment strategies? (10)  

**OR**
4. a. Differentiate soft handover and hard handover (5)  
b. Write short notes on frequency reuse (5)  
c. Comprehend on the packet radio protocols? (5)  
d. Narrate on the fundamental propagation behavior of radio waves and its effects on propagation (5)
5. a. Give an account on various mobile services with its reference model in GSM. (10)  
b. With a neat block diagram explain the protocol architecture of DECT. (10)  

**OR**
6. a. With a neat ray diagram describe the process of mobile originated call (10)  
b. Define handoff. Narrate on the various practical handoff considerations (10)
7. a. With necessary diagrams explain about the satellite system and its orbits (15)  
b. Give short notes on various cyclical repetition of data (5)  

**OR**
8. a. With neat sketch explain about the core network of UTRAN (10)  
b. Narrate the various functions of radio network controller (5)  
c. Write various domains and interfaces of UMTS. (5)
9. a. Describe about DSR protocol (10)  
b. Explain in Flat adhoc routing and Hierarchical routing (10)

**Wishing you All the Best**