

Roll No .....

## IT-7003 (CBGS)

### B.E. VII Semester

Examination, November 2019

## Choice Based Grading System (CBGS)

### Wireless And Mobile Computing

Time : Three Hours

Maximum Marks : 70

- Note: i) Attempt any five questions.  
ii) All questions carry equal marks.

1. Attempt all the parts. 2×7=14
  - a) Describe the Antenna, Antenna types and its radiation pattern.
  - b) Defined the role of multiple access technique in wireless network. Also explain SDMA, DAMA, PRMA.
  
2. Attempt all the parts. 2×7=14
  - a) With the help of diagram, explain system architecture of GSM? Also show the interfacing between different subsystems along with components of each subsystem.
  - b) Describe the process of call handover when a mobile station move?
  
3. Attempt all the parts. 2×7=14
  - a) Explain the IEEE 802.11 protocol architecture with a neat diagram.
  - b) Discuss the features of bluetooth enabled devices and their security features.
  
4. Attempt all the parts. 2×7=14
  - a) Differentiate between Traditional TCP and Mobile TCP. Also explain the working of Indirect TCP.
  - b) Illustrate the TCP connection timeout freezing of transmission protocol.
  
5. Attempt all the parts. 2×7=14
  - a) What are the components of a virus? Discuss the four phases in the life time of a virus.
  - b) Explain the design principle of firewall and its types.
  
6. Attempt all the parts. 2×7=14
  - a) Illustrate the problem of near and far terminals in medium access control.
  - b) Explain the protocol architecture of Hiperlan and also mark the advantage and disadvantage of Hiperlan.
  
7. Attempt all the parts. 2×7=14
  - a) Compare and contrast I-TCP, Snooping TCP and Mobile TCP.
  - b) Explain the following with respect to mobile IP.
    - i) IP packet delivery
    - ii) Agent discovery
    - iii) Registration
  
8. Attempt all the parts. 2×7=14
  - a) Draw and explain GPRS architecture.
  - b) How authentication is possible in wireless LAN. List and discuss the possible attacks on such network.