Code: IT7T3

## IV B.Tech - I Semester – Regular/Supplementary Examinations March - 2021

## MOBILE COMPUTING (INFORMATION TECHNOLOGY)

Duration: 3 hours Max. Marks: 70

PART - A

Answer *all* the questions. All questions carry equal marks

 $11 \times 2 = 22 \text{ M}$ 

1.

- a) What is Mobile Computing?
- b) How GSM provides security?
- c) Define SDMA.
- d) List goals of Mobile IP.
- e) What is Traditional TCP?
- f) What is Server-alerted synchronization?
- g) List Characteristics of a mobile agent.
- h) Find the problem with fixed infrastructure network.
- i) List MANET Properties.
- j) What are the functions of MAC management sub-layer?
- k) Define WML Script.

## PART - B

Answer any <i>THREE</i> questions. All questions carry equal marks. $3 \times 16 = 48 \text{ M}$	
2. a) Explain Radio subsystem of GSM.	8 M
b) Illustrate Multiple Access with Collision Avoidance.	8 M
3. a) Explain IP-in-IP-encapsulation.	8 M
b) Demonstrate Snooping TCP as a Transparent TCP extension.	8 M
4. a) Explain how Synchronization is achieved in Mobile computing systems.	8 M
b) Illustrate Mobile agent-based architecture.	8 M
5. a) Demonstrate Mobile Ad-hoc Network (MANET) Organization.	8 M
b) Explain Mobile Ad-hoc Network (MANET) Security	
6. Explain Wireless Application Protocol (WAP 1.1)	8 M
Architecture.	16 M