Code: IT7T3

## IV B.Tech - I Semester – Regular Examinations – October 2017

## MOBILE COMPUTING (INFORMATION TECHNOLOGY)

Duration: 3 hours Max. Marks: 70

PART - A

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

11x 2 = 22 M

1. a) What is mobile computing?

- b) Differentiate mobile computing from wireless networking.
- c) What is the taxonomy of MAC protocol?
- d) What is the key mechanism in Mobile IP?
- e) What is snooping?
- f) What is mobile agent?
- g) What are the limitations of mobile computing?
- h) Define Reactive protocols.
- i) What are the functions of each node in MANET?
- j) Explain the session establishment in WSP.
- k) Mention the different entities in a mobile IP.

## PART - B

Answer any *THREE* questions. All questions carry equal marks.  $16 \times 3 = 48 \text{ M}$ 

- 2. a) Show with a diagram the steps involved in a mobile terminated call (a station calling a mobile station) in GSM.

  8 M
  - b) Explain the architecture of a mobile computing environment. Define the function of the presentation, application and data tier of mobile computing environment. 8 M
- 3. a) Discuss in detail about Dynamic Host Configuration Protocol. 8 M
  - b) Explain mechanism for IP packet delivery using mobile IP concept. 8 M
- 4. a) What are domain-dependent specific rules for data synchronization. 8 M
  - b) What are aglets. How they are used in mobile agents? 8 M
- 5. a) Differentiate between fixed infrastructure architecture V/s MANETS. 8 M

b) Explain about data dissemination in WSN.	8 M
6. a) Write short notes on WAE.	8 M
b) Draw and discuss the protocol architecture of WAP.	8 M