Reg. No.:								14			

Question Paper Code: 53238

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2019.

Sixth Semester

Information Technology

IT 6601 — MOBILE COMPUTING

(Common to Computer Science and Engineering)

(Regulation 2013)

(Also Common to PTIT 6601 — Mobile Computing for B.E. Part Time-Fifth Semester — Computer Science and Engineering — Regulation 2014)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

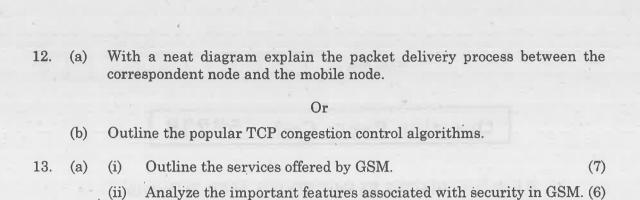
- 1. What do you mean by mobile computing?
- 2. Give some examples of reservation-based schemes in MAC protocols.
- 3. Identify the desirable features of Mobile IP.
- 4. Show the structure of a TCP segment.
- 5. Identify the services offered by GPRS.
- 6. List out the advantages of UMTS networks over 2G networks.
- 7. Why is routing in MANET so complex task?
- 8. Compare MANET versus VANET.
- 9. List some special constraints for mobile operating systems.
- 10. What are the desirable properties of a mobile payment system?

PART B - (5 × 13 = 65 marks)

- 11. (a) (i) Describe the characteristics of mobile computing. (5)
 - (ii) Explain the structure of mobile computing application with an illustrative example. (8)

Or

(b) Summarize the functions of Fixed-assignment schemes in MAC protocols.



Or

- (b) Draw and explain the architecture of GPRS. List its advantages and limitations.
- 14. (a) Describe the characteristics and applications of Mobile Ad hoc networks.

Or

- Summarize the two important classes of routing protocols for traditional (b) networks.
- 15. (a) Outline the features of Windows mobile, Symbian and Android operating systems.

Or

- (b) Explain the structure of Mobile commerce framework. (9)(i)

 - State the pros and cons of Mobile Commerce. (ii)

(4)

PART C — $(1 \times 15 = 15 \text{ marks})$

16. (a) Organize the steps involved in operation of Destination-Sequenced Distance-Vector Routing protocol. Illustrate with an example.

Or

Discuss in detail about the mobile IP working principle with a neat (b) diagram. Explain the tunneling operation with a encapsulated format message.