

Reg. No.:						
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## Question Paper Code: X 20771

## B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020

Sixth Semester

Information Technology

IT 6601 – MOBILE COMPUTING

(Common to Computer Science and Engineering) (Regulations 2013)

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

Time: Three Hours

Maximum: 100 Marks

## Answer ALL questions

PART - A (10×2=20 Marks)

- 1. Differentiate mobile computing and wireless networking.
- 2. List some random assignment scheme.
- 3. What is the key mechanism in mobile IP?
- 4. State the purpose of Home Location Register (HLR).
- 5. Identify the services offered by GPRS.
- 6. List out the advantages of UMTS networks over 2G networks.
- 7. Compare VANET with MANET.
- 8. Differentiate cellular with adhoc networks.
- 9. Define POS.
- 10. Differentiate E-commerce and M-commerce.

PART – B (5×13=65 Marks)

**(5)** 

- 11. a) i) Describe the characteristics of mobile computing.
  - 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.

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12. a) Explain about the key mechanism in mobile IP.

(OR)

- b) Give the comparison of various TCP advantages and disadvantages in wireless networking.
- 13. a) Describe about the system architecture of global system for mobile communication.

(OR)

- b) What is UMTS? Describe the function of HLR and VLR in call routing and roaming.
- 14. a) Explain the design issues of MANET routing protocols in detail.

(OR)

- b) Explain any two VANET routing protocol with an example.
- 15. a) Explain in detail components of iPhone operating systems. List the special features of a mobile operating system.

(OR)

b) Explain in detail mobile payment schemes and their security issues.

PART - C (1×15=15 Marks)

16. a) What is the reaction of standard TCP in case of packet loss? In what situation does this reaction make sense and why is it quite often problematic in the case of wireless networks and mobility? (15)

(OR)

b) Explain android software stack with neat diagram. (15)