

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SEVENTH SEMESTER B.TECH DEGREE EXAMINATION(S), MAY 2019

Course Code: IT403

Course Name: Mobile Computing

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

- | | | Marks |
|---|--|-------|
| 1 | a) Explain how IEEE 802.11 provides MAC in infrastructure networks | (9) |
| | b) Explain GPRS architecture with the help of a neat diagram. | (6) |
| 2 | a) Write a short note on cellular wireless networks. | (6) |
| | b) Explain the purpose of Equipment Identity Register in GSM. | (3) |
| | c) Differentiate between BTS, BSC and MSC. | (6) |
| 3 | a) What is QOS? List some of the QOS in 3G | (3) |
| | b) List the goals of Wireless LAN. | (3) |
| | c) Differentiate between mobile originated call and mobile terminated call in GSM? | (6) |
| | d) What is the role of GPRS support nodes? | (3) |

PART B

Answer any two full questions, each carries 15 marks.

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|---|--|------|
| 4 | a) What is the purpose of agent discovery in mobile IP? Describe the process. | (10) |
| | b) Explain the pros and cons of snooping TCP? | (5) |
| 5 | a) Explain the steps involved in the IP packet delivery. | (5) |
| | b) List out different enhancements to TCP for mobility support. Explain any three of them. | (10) |
| 6 | a) Explain about different types of encapsulation. | (9) |
| | b) Why do we go for I-TCP? What are the advantages and disadvantages of it. | (6) |

PART C

Answer any two full questions, each carries 20 marks.

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| 7 | a) Explain about (i) Flat ad-hoc routing (ii) Hierarchical ad-hoc routing | (10) |
| | b) Explain the wireless transport layer security | (10) |
| 8 | a) Describe the situations in which mobile ad hoc networks are used instead of infrastructure mode | (6) |

- b) What are the difficulties in designing a routing algorithm for ad hoc wireless algorithm in comparison with wired network routing algorithm? (6)
- c) List any four Mobile App Development Tools and explain it. (8)
- 9 a) Explain about security challenges in mobile Ad Hoc networks. (8)
- b) Explain any three protocols in WAP protocol suite. (12)
