

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SEVENTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), DECEMBER 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) Differentiate between W-CDMA and CDMA 2000 | (4) |
| b) Write a short note on IMT 2000 | (3) |
| c) Explain how security is provided by GSM? | (8) |
| 2 a) Compare the generations of Cellular wireless networks | (8) |
| b) Explain different types of handovers in GSM? | (7) |
| 3 a) Write short note on GPS | (5) |
| b) What is meant by cell splitting? | (2) |
| c) Explain the purpose of MSISDN, IMSI, TMSI and MSRN. | (8) |

PART B

Answer any two full questions, each carries 15 marks.

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|---|-----|
| 4 a) What is DHCP? Explain its operations with neat diagram. | (8) |
| b) Explain slow start mechanism in conventional TCP. What is the impact of higher rate and missing acknowledgements in wireless networks on slow start. | (7) |
| 5 a) What is the purpose of Registration in mobile IP? What are the methods used to achieve this? | (8) |
| b) Explain the handover process in Indirect TCP. What happens when the mobile is disconnected? | (7) |
| 6 a) With a neat diagram explain Minimal encapsulation. | (6) |
| b) Discuss about the various mechanisms of Traditional TCP that influence its efficiency in mobile environment? | (9) |

PART C

Answer any two full questions, each carries 20 marks.

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| 7 a) Explain Dynamic Source Routing algorithm for ad hoc networks. | (12) |
| b) Explain the wireless control message protocol | (3) |
| c) List the applications of M-commerce | (5) |

- 8 a) Describe the major security goals of MANET (2)
- b) Compare Proactive and Reactive routing protocols .Write one example for each (8)
type. Discuss the advantages and disadvantages of both.
- c) What is wireless transaction protocol and explain different classes of transaction (10)
services.
- 9 a) Describe how Least Interference Routing calculates the cost in terms of (10)
interference and finally identifies best path with a proper example.
- b) With a neat diagram explain Wireless Application Environment. (10)
