

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SEVENTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018

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) Compare the architecture of IEEE 802.11 infrastructure based and ad-hoc networks | (10) |
| | b) Differentiate between MOC and MTC routing scenarios? | (5) |
| 2 | a) Explain WCDMA. | (7) |
| | b) Describe the architecture of GPRS with a neat diagram. | (8) |
| 3 | a) Describe cellular wireless networks. | (6) |
| | b) What is GPS? List the applications of GPS. | (4) |
| | c) What are the teleservices provided by GSM? | (5) |

PART B

Answer any two full questions, each carries 15 marks.

- | | | |
|---|--|------|
| 4 | a) Describe how a packet from correspondent node transmitted to the mobile node, including the message exchanges made by in the process of packet transmission in the context of tunneling | (10) |
| | b) How can the overhead for TCP be reduced using transaction-oriented TCP? | (5) |
| 5 | a) Point out the essential requirements of Mobile IP | (5) |
| | b) Explain the transmission mechanism of Indirect TCP and Snooping TCP. | (10) |
| 6 | a) Define Care-of address (COA). What are the two possibilities for the location of COA? | (4) |
| | b) With a neat diagram explain IP in IP encapsulation | (3) |
| | c) How does the foreign agent increase efficiency and still maintains its transparency during data transfer in snooping TCP? | (4) |
| | d) Explain the advantages of mobile TCP. | (4) |

PART C

Answer any two full questions, each carries 20 marks.

- | | | |
|---|---|------|
| 7 | a) How does the distance vector routing is enhanced as DSDV to work for ad hoc networks? Describe routing table structure also. | (10) |
|---|---|------|

- b) What are the different mobile payment methods? (5)
- c) What are the different android application components? (5)
- 8 a) Discuss about problems with routing in Mobile Ad-hoc Networks. (10)
- b) Draw the components and interface of WAP architecture and explain each layer. (10)
- 9 a) Describe the working of hierarchical ad-hoc routing protocols. Give two examples. Write any one advantage and disadvantage of this hierarchical routing. (10)
- b) What are the different M-Commerce services? (5)
- c) What is wireless session protocol/browsing (WSP/B)? What are the special features offered by WSP/B for web browsing (5)
