

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Sixth Semester B.Tech Degree (S, FE) Examination May 2023 (2015 Scheme)

**Course Code: CS364****Course Name: MOBILE COMPUTING**

Max. Marks: 100

Duration: 3 Hours

PART A*Answer all questions, each carries 3 marks.*

Marks

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| 1 | What are the functions of Middleware and Gateways in Mobile Computing? | (3) |
| 2 | Differentiate between FDMA and TDMA. | (3) |
| 3 | What is a handoff? What are the reasons for a handoff to be conducted? | (3) |
| 4 | Explain the different applications of Mobile Computing. | (3) |

PART B*Answer any two full questions, each carries 9 marks.*

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| 5 | Explain the three-tier architecture of Mobile Computing. | (9) |
| 6 | a) Explain the functional architecture of GSM with appropriate diagram. | (5) |
| | b) Explain the Cellular concept in Mobile Computing with a neat sketch. | (4) |
| 7 | a) With a neat diagram, explain Frequency hopping spread spectrum. | (5) |
| | b) List the important design considerations of Mobile Computing. | (4) |

PART C*Answer all questions, each carries 3 marks.*

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| 8 | What are the roles of DHCP in mobile networks? | (3) |
| 9 | List the major functions of MAC Layer. | (3) |
| 10 | Explain snooping TCP. | (3) |
| 11 | Explain the procedure for Service Discovery using Mobile Agents in MANET. | (3) |

PART D*Answer any two full questions, each carries 9 marks.*

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| 12 | Explain IEEE 802.11 wireless LAN protocol architecture. | (9) |
| 13 | a) State the challenges and requirements of a mobile transport layer? | (5) |
| | b) List the merits and demerits of indirect TCP technique. | (4) |
| 14 | Explain about Mobile TCP with neat diagrams. | (9) |

PART E*Answer any four full questions, each carries 10 marks.*

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| 15 | What is WAP? Explain its architecture in detail. | (10) |
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| 16 | Explain the following:
(i) Bluetooth (ii) PalmOS. | (10) |
| 17 | Draw and explain architecture of 5G network. | (10) |
| 18 | Describe Networks LTE Architecture & Interface in detail. | (10) |
| 19 | Explain the security issues in mobile computing. | (10) |
| 20 | Explain snooping TCP. What are its advantages and disadvantages? | (10) |
