

Code No: 824AZ

R15**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA V Semester Examinations, April/May - 2019****MOBILE COMPUTING****Time: 3hrs****Max.Marks:75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**5 × 5 Marks = 25**

- 1.a) Explain the 3-tier architecture for Mobile Computing. [5]
- b) Brief about NSS component of GSM protocol. [5]
- c) Distinguish the adhoc wireless network from the one with infrastructure. [5]
- d) Write about CLDC configuration of J2ME. [5]
- e) Differentiate Lossy and lossless compressions of Multimedia. [5]

PART - B**5 × 10 Marks = 50**

- 2.a) Explain how Mobile IP solves the IP addressing issues of Mobile environment? [5+5]
- b) Write about applications of Mobile Computing. [5+5]

OR

- 3.a) Based on the environment mobility characteristics, mention the different Mobile Computing functions. [5+5]
- b) Mention the salient features of IPv6 protocol. [5+5]

4. With a neat sketch write about the GSM system architecture. [10]

OR

5. Write about SMS value-added Services Architecture with the help of a diagram. [10]

- 6.a) Write about IEEE 802.11 WLAN architecture. [5+5]
- b) Write about any one IEEE 802.11 Physical layer protocol. [5+5]

OR

- 7.a) Explain how mobility is dealt with in Wireless LAN? [5+5]
- b) Write about WLAN Security. [5+5]

- 8.a) Giving the hierarchy, write about UI elements in MIDP of J2ME. [5+5]
- b) Brief about the H.323 framework for Voice Over IP (VOIP). [5+5]

OR

9. With a neat sketch, write about the Windows CE architecture. [10]

- 10.a) Write about Audio and Video Coder and Decoders (CODECs). [5+5]
- b) Write about 3GPP security architecture. [5+5]

OR

11. Through the architectural diagram, elaborate about IP Multimedia Subsystems (IMS). [10]