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P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belgaum)

Third Semester, M. Tech. - Computer Science and Engineering (MCSE)

Semester End Examination; Dec - 2016/Jan - 2017

Wireless and Mobile Communication

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

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|------|---|----|
| 1 a. | Explain the 3-tier architecture for mobile computing with necessary diagrams. | 10 |
| | b. Briefly discuss the strength of SMS. | 10 |
| 2 a. | With a neat diagram explain the GPRS system architecture. | 10 |
| | b. Briefly discuss the applications of GPRS. | 10 |

UNIT - II

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|------|---|----|
| 3 a. | Write the basic differences between mobile IPv4 and mobile IPv6. | 10 |
| | b. Discuss the tunneling with respect to mobile IP with appropriate diagrams. | 10 |
| 4 a. | Explain the mobile IP architecture. | 10 |
| | b. Describe the design constraints in applications for handled devices. | 10 |

UNIT - III

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|------|---|----|
| 5 a. | Describe smart client architecture with diagram. | 10 |
| | b. With a neat diagram, explain the palm OS architecture. | 10 |
| 6 a. | Explain the concept of data synchronization and its architecture. | 10 |
| | b. Discuss the need of analysis and design phases. | 10 |

UNIT - IV

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|------|---|----|
| 7 a. | Illustrate the processing a wireless request. | 10 |
| | b. Explain the WAP programming model. | 10 |
| 8 a. | Explain the 3-tier architecture for wireless internet architecture. | 10 |
| | b. Discuss on the following : | 10 |
| | i) WML ii) X HTML. | |

UNIT - V

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|-------|--|----|
| 9 a. | What is CLDC? How do you program for CLDC? Explain in detail. | 10 |
| | b. Explain briefly the low level GUI components. | 10 |
| 10 a. | What is J2ME MIDP? Explain its various functional components in detail. | 10 |
| | b. List and explain the different security considerations in J2ME. Also explain the mechanisms through which they are handled. | 10 |

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