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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

| | | |
|---|---|---|
| 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

| | | |
|---|---|---|
| 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

| | | |
|---|---|---|
| 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 : <br> i) WML        ii) X HTML. | 10 |

## UNIT - V

| | | |
|---|---|---|
| 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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