Reg. No. :

Question Paper Code: 52431

M.E. DEGREE EXAMINATION, NOV 2016

Third Semester

Computer Science and Engineering

15PNE301 - MOBILE AND PERVASIVE COMPUTING

(Regulation 2015)

(Common to Computer Science and Engineering (With Specialization in Networks))

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. _____ is able to move from one physical location to another location with same service.

    (a) Network mobility   (b) User mobility
    (c) Bearer mobility   (d) Device mobility

2. Who is responsible for processing the web service request?

    (a) Infrastructure mode   (b) ad-hoc mode
    (c) both (a) and (b)   (d) none of these

3. Which of the following is most popular open system alternative to system like iOS blackberry OS?

    (a) Android   (b) Symbian   (c) Solaries   (d) All the above

4. m-business provides

    (a) Business models   (b) Trusted Environment
    (c) Payment System   (d) All the above

5. Which one is not a nickname of a version of Android?

   (a) cupcake   (b) Gingerbread   (c) Honeycomb   (d) Muffin

PART - B (5 x 3 = 15 Marks)

6. Compare various tries available in 3-tier architecture.

7. What are the goals of UMTS?

8. What do you mean by soft switch architecture network?

9. Mention any four operating issues of pervasive computing.

10. Write a WML application to take the age of the user as input & display whether he/she is eligible for voting.

PART - C (5 x 16 = 80 Marks)

11. (a) Write brief notes on client context manager.   (16)

Or

   (b) Explain in detail about mobile computing networks.   (16)

12. (a) Explain three limitations of IPv4 that are overcome by IPv6. You have a communication application that uses sockets in IPv4, what are the steps you need to follow to port this application from IPv4 to IPv6.   (16)

Or

   (b) You need to develop a secured healthcare application. What information will you keep in the Java card and what will be in the backend server? How will you secure this information on the Java card.   (16)

13. (a) Compare various IEEE standards available in the networking.   (16)

Or

   (b) Compare the security features of palm OS and Symbian OS.   (16)

14. (a) Describe the biometric and the functionalities of the biometric. Explain it in detail.
                                                                                                     (16)

Or

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(b) (i) Explain in detail about m-business application with examples. (8)

(ii) Explain in brief about the operating system issues associated with pervasive computing. (8)

15. (a) Write a WML program code to convert temperature from degree centigrade to Fahrenheit using WML code. (16)

Or

(b) Organize the ideas and relate the connection between WWW programming model and WAP programming model. (16)

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