

Total No. of Questions : 10]

Nov 17

P2334

SEAT No. :

[Total No. of Pages : 2

[5254]-669

**B.E. (Computer Engineering)  
PERVASIVE COMPUTING**

**(2012 Pattern) (Elective - II) (Semester-I)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Attempt Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, or Q9 or Q10.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Assume Suitable data if necessary.

- Q1) a) What is transparency? What is openness? Are they complementary to each other? [5]
- b) Define context? Comment on context awareness? [5]

OR

- Q2) a) Explain dynamic adaptation in IBM's transcoding application. [5]
- b) Comment on improvement in device technology how devices can be more suitable for pervasive computing? [5]

- Q3) a) What is posthumary model of UbiCom? How sense of presence and telepresence is generated in UbiCom? [6]
- b) How the brain computer interface is facilitated? [4]

OR

- Q4) a) Discuss any application of hidden UI in wearable computing. [4]
- b) Differentiate between. [6]
- i) Virtual vs. Augmented reality.
  - ii) Mediated vs. Embodied Reality.

- Q5) a) What is middleware? What can be adapted in middleware. [6]
- b) Explain core capabilities of context aware applications. [6]
- c) How service discovery helps in middleware adaptation. Explain in brief with example. [4]

OR

- Q6) a) How data adaptation is done in UbiCom? Explain. [6]
- b) What is mobile agent? Give architecture? Mobile agent? [6]
- c) Write short note on mobile middleware. [4]

- Q7) a) Differentiate between security and Privacy in UbiCom? [6]
- b) Explain Kerberos as authentication algorithm. [7]
- c) Discuss different defense strategies for network security. [4]

OR

- Q8) a) Explain V-SAT Security models in UbiCom? [6]
- b) Discuss blowfish algorithm in detail for authentication. [7]
- c) Compare different collaborative defense strategies. [4]

- Q9) a) Discuss challenges in UbiCom? How they can be overcome? [9]
- b) Differentiate between machine intelligence and human intelligence. [8]

OR

- Q10) a) Discuss device interaction in smart devices. [8]
- b) Write Short note on: [9]

- i) Smart watch
- ii) Smart boards, Pads and Tabs.
- iii) Smart meeting Rooms.

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P.T.O.

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