

Total No. of Questions : 10]

SEAT No. :

P2334

[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 posthuman 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.

P.T.O.

- 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 adaption. Explain in brief with example. [4]

OR

- Q6)** a) How data adaption 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.

