

Total No. of Questions : 10]

SEAT No. :

P2044

[Total No. of Pages : 2

[5059]-649

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

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

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Neat diagrams must be drawn wherever necessary.*
- 2) Figures to the right indicate full marks.*
- 3) Assume suitable data if necessary.*

- Q1)** a) Define HCI. Explain explicit and implicit HCI. [6]  
b) Explain Human-to-Human Interaction (HHI) applications. [4]

OR

- Q2)** a) Explain wearable computer interaction. [6]  
b) Explain Pervasive games and social physical spaces. [4]

- Q3)** a) Explain Context aware computing and types of contexts with example. [6]  
b) Explain mobile middleware with example. [4]

OR

- Q4)** a) Explain the types of context aware applications and steps for developing context aware applications. [6]  
b) Explain application aware adaptation architecture. [4]

- Q5)** a) Explain mobile and wireless security issues. [10]  
b) Explain in detail : [8]  
i) Replay attacks  
ii) Traffic analysis

OR

**P.T.O.**

**Q6)** a) Explain the concept of 'Agent' related to mobile middleware and services offered by Agent. [10]

b) Explain the various problems with GSM security. [8]

**Q7)** a) Explain smart Human-Device Interaction in detail. [10]

b) Explain Human intelligence versus machine intelligence. [6]

OR

**Q8)** Write notes on : [16]

a) Eco friendly Ubicom Devices

b) Cyber Physical Systems

**Q9)** a) Explain the Social Networking for smart interactions with examples. [10]

b) How distributed systems interaction to be more intelligent? Explain. [6]

OR

**Q10)** a) Explain various security issues in Ad Hoc Networks. [10]

b) Explain Wearable computers in detail. [6]

\*\*\*