

Total No. of Questions : 10]

SEAT No. :

P4007

[5561]-714

[Total No. of Pages : 2

B.E. (Information Technology)
UBIQUITOUS COMPUTING
(2015 Pattern) (Semester - II) (414463)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

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

Q1) a) What are the features of ubiquitous computing? **[5]**

b) Explain all core properties of pervasive computing? **[5]**

OR

Q2) a) List and explain three main types of environment context? **[5]**

b) Explain micro-actuation and sensing (MEMS) in detail? **[5]**

Q3) a) Explain smart devices under CPI and CCI? **[5]**

b) Explain types of transparency mobile services? **[5]**

OR

Q4) a) Explain proxy based service access and give its disadvantages? **[5]**

b) Explain three major types of robot? **[5]**

Q5) a) Explain human entered design lifecycle in detail with diagram? **[8]**

b) List out all handling limited key input and explain it in detail? **[8]**

OR

Q6) a) Write short note on : **[9]**

i) Multi-modal visual interface

ii) Gesture interface

iii) Tangible interface

b) Describe user models and its acquisition and representation? **[7]**

P.T.O.

- Q7) a)** Define and explain all ways of addressing privacy in ubiquitous system? **[8]**
b) Explain Solov's taxonomy of privacy with diagram? **[8]**

OR

- Q8) a)** Describe all privacy difficulties and challenges of RFID tag? **[8]**
b) Describe all challenges to privacy for ubiquitous computing? **[8]**

- Q9) a)** Write short note on : **[12]**

- i) Network protocol suits
- ii) Routing and inter-networking
- iii) PSTN voice network
- iv) Configuration management

- b)** Describe wireless data network with its types? **[6]**

OR

- Q10) a)** Write short on : **[8]**

- i) Personal area network
- ii) Body area network

- b)** Explain multi-path routing in mobile ad hoc network (MANET) with neat diagram. **[6]**

- c)** Explain mesh network and overlay network with diagram. **[4]**
