

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]
