

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**ME - SEMESTER- I • EXAMINATION – WINTER 2014**

**Subject Code: 3715506****Date: 12/01/2015****Subject Name: pervasive Computing****Time: 2:30 to 5:00 Pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is the principal significance of the study of the Pervasive Computing Systems? Why these systems are called so? **07**
- (b) Discuss Voice XML and its role in UBIKOM. **07**
- Q.2** (a) What are the applications of pervasive computing? Discuss any two of them. **07**
- (b) Explain how pervasive web applications can be accessed via WAP. **07**
- OR**
- (b) Discuss research trends in Pervasive Computing. **07**
- Q.3** (a) What is a mobile agent technology? Explain various API used in JAVA along with sample format. **07**
- (b) Write a note on Pervasive system for Volcano monitoring. **07**
- OR**
- Q.3** (a) Explain UBIKOM along with Block diagram. **07**
- (b) List and Explain the parameters of Quality of Privacy. **07**
- Q.4** (a) Explain Service Location Protocol (SLP). **07**
- (b) Write a note on Autonomic Wireless Mesh Networks(AWMN) **07**
- OR**
- Q.4** (a) How Artificial Intelligent techniques are included to create intelligent ambience? Explain in details **07**
- (b) What are the limitations and challenges of traditional networks? Explain with respect to pervasive network. **07**
- Q.5** (a) Explain the taxonomy of Smart devices. **07**
- (b) What is cross layer interactions? Explain with suitable example and neat diagram **07**
- OR**
- Q.5** (a) Explain features of sensor nodes with respect to communication, storage and computation and energy capabilities. **07**
- (b) Write a note on overview on multi-hop cognitive radio networks MAC layers **07**

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