

Birla Institute of Technology & Science, Pilani
Department of Computer Science and Information Systems
First Semester 2017-2018

Mid-Semester Test

Course No. : CS G541
Course Title : Pervasive Computing
Nature of Exam : Closed Book
Marks : 50
Duration : 90 minutes
Date of Exam : 11/10/2017 (2:00 PM – 3:30 PM)

No. of Pages	= 2
No. of Questions	= 10

Note:

1. Please follow all the *Instructions to Candidates* given on the cover page of the answer book.
2. All parts of a question should be answered consecutively.
3. Assumptions made if any, should be stated clearly at the beginning of your answer.

Q.1. (a) Differentiate between Client-side and Server-side Service Discovery.

(b) In case of composite web services, which is the best mode for service discovery among Client-side service discovery, Server-side discovery, DNS based discovery and Proxy based service discovery?

[3+1=4]

Q.2. (a) What is affective computing?

(b) Discuss any four design challenges of affective computing.

[2+4=6]

Q.3. “Smart Interaction introduces conflicting goals.” – Is this statement true or false? Justify with an example.

[1+3=4]

Q.4. Explain the advantages of having asymmetric communication mode in RFID operations.

[4]

Q.5. Explain Human-ICT Device Interaction with a suitable diagram.

[4+4=8]

- Q.6. Can multiple drivers be associated with a single external device connected to the computer?
Justify your answer with a diagram. [1+5=6]
- Q.7. Explain with a suitable diagram the advantage of Human Centered Design over Technology Centered Design. [3+3=6]
- Q.8. What is a Microbreak? What is its design implication in iHCI? [1+1=2]
- Q.9. Define Event detection/reporting probability and Event classification error with respect to sensors. [2+2=4]
- Q.10. Discuss the primary types of transparency in a pervasive computing environment. [6]
