



Faculty of Engineering and Technology
Term-Test Question Paper – B. Tech.

Department: Computer Science and Engineering

Programme: B. Tech. in Computer Science and Engineering

Semester / Batch: 6 /2018

Examination: 19th May 2021

Course Code: 19CSC313A

Course Title: Distributed and Cloud Computing

Term Test - 1

INSTRUCTIONS TO STUDENTS:

1. Answer all the questions
2. Use only SI units
3. Use of non programmable scientific calculator is permitted
4. Use of data handbook permitted wherever applicable
5. Missing data may be appropriately assumed

Maximum Duration: 1 Hour 30 Minutes

Maximum Marks: 25

IMPORTANT:

You may take this question paper away at the end of the examination. Please keep it in a safe place for future reference

Question No. 1:

(2+3= 05 Marks)

- a. Explain any two characteristics of Distributed Systems.
- b. List any three real time applications of Distributed Systems.

Question No. 2:**(3+2 = 05 Marks)**

- a. Considering internet as an example of a distributed system, explain any three major challenges in its design.
- b. Differentiate between Marshalling and Unmarshalling.

Question No. 3:**(3+2 = 05 marks)**

- a. Discuss the CORBA reference model with a neat diagram.
- b. Explain the importance of middleware in Distributed applications.

Question No. 4:**(3+2= 05marks)**

- a. Illustrate and explain the local and remote method invocations.
- b. List any two RMI invocation semantics with an example for each.

Question No. 5:**(4+1 = 05 marks)**

Scenario: A Salary Reporting (SR) system should provide features for employees to request and view their salary reports ("salary slips"). It consists of three modules (acting as servers): The SR Frontend (interactive) Server, HR Department Server (HRS) and Accounts Department Server (ADS). The HRS provides the employee salary and allowances details as well as the leave information for computing any deductions.

Identify all relevant interactions based on interaction model for this scenario. Justify your choice(s).

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