|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Roll No |  |  |  |  |  |  |  |  |  |  |  |  |

****

**Presidency University**

**Bengaluru**

**School Of Computer Science and Engineering & Information Science**

**SUMMER TERM End-Term Examinations, Aug 2024**

**Date**: 05.08.2024

**Time**: 9:30AM-12:30PM

**Max Marks**: 100

**Weightage**: 50%

**Winter Semester**: 2023 - 24

**Course Code**: CSE3125

**Course Name**: Service Oriented Architecture

**Department:** Computer science & Engineering

**Instructions:**

1. *Read the all questions carefully and answer accordingly.*
2. *Do not write any matter on the question paper other than roll number.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q.No** | **Questions** | **Marks** | **CO** | **RBT** |
| 1 | 1. Difference between XML to HTML. **[Knowledge]** | 4 | CO1 | L1 |
| 1. Define the XML declaration components with suitable example. . **[Comprehension]** | 6 | CO1 | L2 |
| 1. Create an XSLT stylesheet named CatalogStyle.xslt that transforms the Catalog.xml document into an HTML page. The HTML page should display a table of CDs with columns for Title, Artist,country, Price, and Year. Ensure that the table has a header row with column names, and each CD entry is displayed in its own row. **[Application]** | 10 | CO1 | L3 |
| OR | | | | |
| 2 | 1. Define the XML declaration components with suitable example. **[Knowledge]** | 4 | CO1 | L1 |
| 1. Amazon Building Society,Ireland’s largest mutual building society, arrived an SOA model of delivery by accident , which had been doing integration and service works for years.The company opted for parsing method. Describe DOM parser with its components.  **Comprehension]** | 6 | CO1 | L2 |
| 1. Demonstrate  the XSLT process to display the specified library data and all of its components.  **[Application]**  |  |  |  |  | | --- | --- | --- | --- | | Name | UID | Book\_Title | Borrowed\_Date | | Samiksh | 13-2038-01 | Java | 07-Aug-18 | | Rahil | 13-2038-15 | Programming in C | 14-Aug-18 | | Nishanth | 13-2038-19 | DBMS | 13-Sep-18 | | 10 | CO1 | L3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 | 1. Define service oriented architecture.how does it differ from traditional architectural approaches? **[Knowledge]** | 4 | CO2 | L1 |
| 1. Compare Client server architecture and service oriented architecture . **[Comprehension]** | 6 | CO2 | L2 |
| 1. VANCO is a Virtual Network Provider wanted to extend a trouble ticketing system as a shared business process to a busineses parter. Identify and discuss the suitable Service Oriented Architecture with its components which helps VANCO. **[Application]** | 10 | CO2 | L3 |

OR

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4 | 1. Illustrate in what scenarios might a client-server architecture be more suitable than SOA, and vice versa? **[Knowledge]** | 4 | CO2 | L1 |
| 1. Explain the principle of "loose coupling" in SOA. Why is it significant for service interoperability and flexibility? **[Comprehension]** | 6 | CO2 | L2 |
| 1. Microsoft has crafted Visual Basic to allow the creation of reusable components which is invisible to the client that can be deployed and accessed on remote machines of the components' services.Describe single tier client server  architecture with a neat diagram**[Application]** | 10 | CO2 | L3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5 | 1. Describe WSDL in detail **[Knowledge]** | 4 | CO3 | L1 |
| 1. Explain in detail the orchestration **[Comprehension]** | 6 | CO3 | L2 |
| 1. Illustrate the components of UDDI (Universal Description, Discovery, and Integration) and apply their functionalities.**[Application]** | 10 | CO3 | L3 |

OR

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 | 1. Lis tout in detail the concept of chroegrahy**. [Knowledge]** | 4 | CO3 | L1 |
| 1. Describe MEP supported by WSDL 1.1 **[Comprehension]** | 6 | CO3 | L2 |
| 1. Explain in detail the structure of a SOAP (Simple Object Access Protocol) message, with its key components. with an example describe  the usage of SOAP message structure and the role of elements like Envelope, Header, Body, and Fault. **[Application]** | 10 | CO3 | L3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 7 | 1. Outline the steps involved in composing SOA.**[Knowledge]** | 4 | CO4 | L1 |
| 1. Describe the process of messaging with SOAP and Atomic transaction. **[Comprehension]** | 6 | CO4 | L2 |
| 1. Define WS-Policy and how is it used in web services? Describe the basic elements and structure of a WS-configuration document, and explain how configurations are linked to web services to define their requirements and capabilities **[Application]** | 10 | CO4 | L3 |

OR

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 8 | 1. Define WS-Security.**[Knowledge]** | 4 | CO4 | L1 |
| 1. Describe the process of J2EE . **[Comprehension]** | 6 | CO4 | L2 |
| 1. Explain the steps involved in service oriented design in detail **[Application]** | 10 | CO4 | L3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 9 | 1. Define the XML declaration components with suitable example. **[Knowledge]** | 4 | CO1 | L1 |
| 1. Describe the Namespace in XML? **[Comprehension]** | 6 | CO1 | L2 |
| 1. Create an XML Schema Definition (XSD) file named LibraryCatalog.xsd to validate the LibraryCatalog.xml document. Define the schema such that:The Book element is defined as a complex type with Title, Author, ISBN, and PublicationYear as child elements.The ISBN is of type string ,the publication is of type positive interger .Link the XSD and XML document and provide instructions on how to validate the XML against the schema. .**[Application]** | 10 | CO1 | L3 |

OR

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10 | 1. List out the primary characteristics of Distributed internet architecture. **[Knowledge]** | 4 | CO2 | L1 |
| 1. Describe the advantages of SOA ? **[Comprehension]** | 6 | CO2 | L2 |
| 1. HDFS(Hadoop Distributed File System) has a remarkable creation from Doug cutting that continues to be the key component of most big data systems. HDFS tended to encourage people to be more experimental, agile in their approach to embrace all kinds of wacky data formats. Show how Service Oriented Architecture is different from Distributed Server Architecture.**[Application]** | 10 | CO2 | L3 |