

Roll No.: _____

Amrita VishwaVidyapeetham
Amrita School of Engineering, Coimbatore
B.Tech Second Assessment Examinations –August 2019
Seventh Semester
Computer Science and Engineering
15CSE376 Net Centric Programming

Time: Two hours

Maximum: 50 Marks

Course Outcomes (COs)

CO	Course Outcomes
CO 01	Understand the basic concepts of web programming and web server architectures
CO 02	Apply markup and scripting languages to design and validate dynamic webpages
CO 03	Evaluate the appropriateness of client/server side scripting for a given real world web application
CO 04	Design, develop and deploy client/server applications
CO 05	Implement the complete web application development cycle as a term project

Set – III

For Office Use only:

Part A	Q1	Q2	Q3	Q4	Q5	Total
Part B	Q6	Q7				
Part C	Q8	Q9	Q10	Q11		

Instructions for students

- Any student found to be Involved in malpractice (Discussion in the exam, Borrowing/Lending stationery, Possession of Mobile Phones or any other material , Login to Internet, Intranet..., Opening any other Existing Files in the systems etc) would be directed to COE Office immediately for further actions.
- Students are STRICTLY instructed to use the provided exam login ONLY.
- Students are to ensure completion of PART A, B and C questions.

Part A

3 X 5 = 15 Marks

1. What is XML? Mention three main advantages of XML compared with HTML. [CO02][3]

2. Write XSD for the XML [CO02][3]

```
<?xml version="1.0"?>
<brightstar>
  <name>Sirius</name>
  <magnitude>1.45</magnitude>
  <distance>9</distance>

  <name>Canopus</name>
  <magnitude>-5.53</magnitude>
  <distance>310</distance>

  <name>Rigil Kentaurus</name>
  <magnitude>4.34</magnitude>
  <distance>4</distance>
</brightstar>
```

3. Write notes on the different types of statement objects to handle the SQL queries in Java. [CO04][3]

4. Write a DTD definition that best fulfills the following conditions. [CO02][3]

Information for a multiple number of products coded within in one XML document. Character data can be coded for product names (element name: product). The product number must have a single, unique name (attribute name: partsno), and is verified as singular and unique by the XML parser. Characters such as # and @ must not be used in price information (attribute name: price) The default value for price (attribute name: price) is "open". The "product" element must have a defined "partsno" attribute.

5. a. What do you mean by XSLT <xsl: value-of> element? [CO02][1.5+1.5]
b. What is the use of XSLT <xsl: for-each> element?

Part B

15 Marks

6. Write Java Code to write the data from the XML file into Student database (**Student ID, UGcourse, specialization, Date of birth, gender, Duration of course, Fees, Status of course completion and fee payment**) after validating the same using DTD.

[CO02,CO04][10]

S1 – Creating XML File

S2 – Creating table (backend)

S3 – DTD for validating the file (Use of choice list, compulsory attribute, ENTITY is MUST. Populate atleast 5 records)

S4 – Performing Insert operation on database with Java Code

7. Write Schema specifications for the XML document in Q No 6. Also display the Student ID, UGcourse Name and Fees using CSS features in a table. [CO02][5]

Evaluation Scheme

Q No	Section	Max Marks	Marks Awarded	Remarks (IF Any)
6	S1	2		
	S2	1		
	S3	3		
	S4	4		
7	Schema	3		
	CSS	2		
	Total	15		

Signature of the faculty

Part C

20 Marks

Title of the Project:

Specific Contribution under item a,b,c.....

- a. Database Tables used
- b. XML features and DB Connectivity method
- c. Any Others

(Note: Write a Max of Five lines only)

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Evaluation Scheme

Particulars	CO/Max Marks	Marks Awarded
XML/DTD/SCHEMA/XSL/CSS	[CO05][5]	
Documentation	[CO05][5]	
BACKEND update	[CO05][5]	
Viva	[CO05][5]	
Total		

Signature of the faculty