UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2018

Course: XML Programming

Semester: V

Programme: B.Tech. CSE(OSSOS)

Course Code: CSEG359

Time: 03 hrs.

Max. Marks: 100

Instructions: Attempt All the question.

SECTION A

S. No.		Marks	CO
Q 1	What is AJAX? Explain its ready states with example.	4	CO5
Q 2	Discuss four important technologies used in creating a web service.	4	CO5
Q 3	What do you understand with B2C communication?	4	CO5
Q 4	How to store binary data in XML? Explain with example.	4	CO4
Q 5	Differential SAX Parser with DOM.	4	CO2

SECTION B

Q 6	Define and Implement notations using external and internal DTD in XML.	10	CO3
Q 7	Exemplify the non-XML data. How are NOTATIONS implemented in XML? Explain with an XML example.	10	CO2
Q 8	a) What is CSS? How it is useful for markup languages. Elaborate with examples. b) Discuss about document prolog.	7+3	CO4 & CO1
Q 9	Differentiate any _two_ of the following with example: a) XML template vs XML value b) Selector vs Indicator c) WSDL vs UDDI d) HTML vs XHTML	5+5	CO1, CO3 & CO4

SECTION-C

Q 10	Create library.xml file with the following constraints:
	 a. Library has book and member details
	     i. More than one book and member is possible
	 b. Books has the following elements
	     i. id
	     ii. name
	     iii. author
	     iv. ISBN
	     Restrictions:
	         • id, name, author are mandatory fields. More than one author and
		4+6 +10	CO3 & CO4

	ISBN number can be possible.
	
	   c. Member has the following elements
	       i. id
	       ii. password
	      iii. name
	      iv. age
	       v. email
	      vi. phoneNumber
	     vii. panNumber
	    viii. passportNumber
	       __Restrictions:__
	       • id, password, name, age fields are mandatory
	       • email is optional. maximum one email is allowed
	       • more than one phoneNumber is allowed.
	       • (passportNumber, panNumber) either this or that is allowed only once
	       • hightlight emailId, name and author with different color
	Create the XML document for at least 5 books and 5 members. Check the XML document for well formness. Use proper XSD declaration.		

Q 11	Discuss the following with examples wherever it require:
	   a) Predicates used in XPath with example.
	      OR
	      XML name space.
	   b) Encoding schemes used in XML
	      OR
	      Binary Embedding
	   c) W3C standard
	      OR
	      SOAP
	   d) Mixed content type
	      OR
	      Xslt
		**5+5
		+5+5**
			**CO2
			&
			CO4**

Name of Examination (Please tick, symbol is given)	:	MID		END	⊟	SUPPLE	
Name of the School (Please tick, symbol is given)	:	SOE		SOCS	⊟	SOP	
Programme	:	B.Tech CSE (OSS&OS)					
Semester	:	V					
Name of the Course	:	XML Programming					
Course Code	:	CSEG 359					
Name of Question Paper Setter	:	Amit Singh					
Employee Code	:	40001672					
Mobile & Extension	:	8290727943					

Note: Please mention additional Stationery to be provided, during examination such as Table/Graph Sheet etc. else mention "NOT APPLICABLE":

FOR SRE DEPARTMENT

Date of Examination	:	
Time of Examination	:	
No. of Copies (for Print)	:	

Note: - Pl. start your question paper from next page

Model Question Paper (Blank) is on next page

Name: Enrolment No:	UPES

Course: XML Programming   Semester: V
Programme: B.Tech. CSE+OSSOS   CSEG 359
Time: 03 hrs.   Max. Marks: 100
Instructions: Attempt All the question.

SECTION A

S. No.		Marks	CO
Q 1	What is Schema? How we can implement it in XML?	4	CO3
Q 2	Discuss four important technologies used in creating a web service.	4	CO5
Q 3	What do you understand with B2B communication?	4	CO5
Q 4	What is binary encoding and binary embedding in XML?	4	CO4
Q 5	Explain different type of XML parsers.	4	CO2

SECTION B

Q 6	Define and Implement notations using XSD in XML.	10	CO3
Q 7	Characterize and categories ENTITY in XML with example of each.	10	CO2
Q 8	a) What is CSS? How it is useful for markup languages. Elaborate with examples. b) Discuss about the validation of XML file.	7+3	CO4 & CO1
Q 9	Explain any *two* of the following with example a) Indicators b) Selectors c) XML application d) CSS Typography	5+5	CO1, CO3 & CO4

SECTION-C

| Q 10 | Create library.xml file with the following constraints:
a) Library has book and member details
   i. More than one book and member is possible
b) Books has the following elements
   i. id
   ii. name
   iii. author
   iv. ISBN
     Restrictions:
     • id, name, author are mandatory fields. More than one author and ISBN number can be possible.

c) Member has the following elements
   i. id
   ii. password | 4+6 +10 | CO3 & CO4 |

	iii. name iv. age v. email vi. phoneNumber vii. panNumber viii. passportNumber ***Restrictions:*** • id, password, name, age fields are mandatory • email is optional. maximum one email is allowed • more than one phoneNumber is allowed. • (passportNumber, panNumber) either this or that is allowed only once • hightlight emailId, name and author with different color Create the XML document for at least 5 books and 5 members. How to check the XML document for well formness. Use proper XSD declaration.		

Q 11	a) Write a program using XML and XSL to show the use of for loop and sorting.
	
	                          OR
	Write a program to demonstrate xsl in XML.
	b) Is XML meant to be a replacement of HTML? Explain.
	                          OR
	How is Display and Visibility handled in XML?
	c) Make a food menu card of a restaurant in XML with restriction of minimum quantity of each item ordered by the customer. Soup is complementary with food item. Free delivery is also available with minimum order of 500 INR.
	                          OR
	Create XML document that hold information about people at UPES. The root element should be called "UPESpeople" and it should contain separate elements for students, faculty and staff in any order.
	
	Student elements should have required enrollment number attribute that is identified as an ID. Student should also have an attribute indicating their current class standing. This should be required and one of the following: freshman, sophomore, junior, senior, grad, unclassified. The student element should contains the following elements (in order)
	    a) Name
	    b) Address (with a required attribute indicating if local or permanent) there may be one or more of these and you may define child element
	    c) Phone Number (zero or more with an optional attribute indicating local, permanent, mobile)
	    d) E-mail address (one or more)
		5+5 +10	**CO1 & CO4**