

Enrollment No.....



Faculty of Engineering  
End Sem (Even) Examination May-2022  
CS3EL08 Programming with XML  
Programme: B.Tech. Branch/Specialisation: CSE

**Duration: 3 Hrs.****Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. What does XML stand for? 1  
 (a) Extra Modern Link  
 (b) Extensible Markup Language  
 (c) Example Markup Language  
 (d) X-Markup Language
- ii. Is it easier to process XML than HTML? 1  
 (a) Yes (b) No  
 (c) Sometimes (d) Cannot say
- iii. What does DTD stand for? 1  
 (a) Direct Type Definition (b) Document Type Definition  
 (c) Do the Dance (d) Dynamic Type Definition
- iv. The use of a DTD in XML development is: 1  
 (a) Required when validating XML documents  
 (b) No longer necessary after the XML editor has been customized  
 (c) Used to direct conversion using an XSLT processor  
 (d) A good guide to populating a template to be filled in when generating an XML document automatically
- v. The default model for complex type, in XML schemas for element is- 1  
 (a) Text Only (b) Element Only  
 (c) No default type (d) Both (a) and (b)
- vi. A schema describes- 1  
 (a) Grammar  
 (b) Vocabulary  
 (c) Structure and data type of document  
 (d) All of these

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[2]

vii.	To match the root node in XMLT transform the syntax will be-	1
	(a) <xsl:template match="Document">	
	(b) <xsl:template match="Root">	
	(c) <xsl:template match="RootNode">	
	(d) <xsl:template match=" /">	
viii.	The XSL formatting object use to format a list is-	1
	(a) List-block	
	(b) List-item	
	(c) List-item-body	
	(d) List-item-label	
ix.	Location path in XPath is-	1
	(a) Absolute path	
	(b) Relative path	
	(c) Both (a) and (b)	
	(d) Neither (a) and (b)	
x.	Operators in X Path are?	1
	(a) Comparison operator	
	(b) Boolean operator	
	(c) String operator	
	(d) All of these	
Q.2	i. Define XML.	2
	ii. What is the difference between XML and HTML?	3
	iii. How we are able to validate XML document? Explain it by taking suitable example.	5
OR	iv. Explain the element and attributes of XML with examples.	5
Q.3	i. What do you mean by empty elements and number of occurrences in DTD?	2
	ii. What is DTD? Explain advantage and disadvantages of DTD.	8
OR	iii. How to create external DTD for notebook XML? Also explain the process of linking DTD to XML file.	8
Q.4	i. What do you mean by XML schema?	3
	ii. Explain simple and complex data types for XML.	7
OR	iii. How can we create the XML schema for notebook XML? Also explain the process of linking and validating it with XML file.	7
Q.5	i. What do you mean by XSL? Explain layout and templates for XSL.	4
	ii. Explain the process for creating a XSLT for a notebook and XML and generate the output in different condition.	6

[3]

OR	iii.	How can we transform XSL with XSLT? Explain with the help of suitable example.	6
Q.6		Attempt any two:	
	i.	What do you mean by XPath? Explain how XPath is used to navigate XML document.	5
	ii.	How to create the XML file for student information? Apply the validation, schema and XSLT for the created file and display the student information in browser	5
	iii.	What are the uses of predicates? Also explain the different condition for using the predicates in XPath.	5

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## Marking Scheme

### CS3EL08 Programming with XML

Q.1	i.	What does XML stand for? (b) Extensible Markup Language	1
	ii.	Is it easier to process XML than HTML? (a) Yes	1
	iii.	What does DTD stand for? (b) Document Type Definition	1
	iv.	The use of a DTD in XML development is: (a) Required when validating XML documents	1
	v.	The default model for complex type, in XML schemas for element is- (b) Element Only	1
	vi.	A schema describes- (d) All of these	1
	vii.	To match the root node in XMLT transform the syntax will be- (d) <xsl:template match="" /">	1
	viii.	The XSL formatting object use to format a list is- (a) List-block	1
	ix.	Location path in XPath is- (c) Both (a) and (b)	1
	x.	Operators in X Path are? (d) All of these	1

Q.2	i.	XML definition	2 Marks	2
	ii.	Three point difference	3 Marks	3
	iii.	XML validation and example	2.5 Marks each (2.5 Marks*2)	5
OR	iv.	Explanation of element and attributes	2.5 Marks each (2.5 Marks*2)	5

Q.3	i.	Empty elements and number of occurrences in DTD	2 Marks	2
	ii.	DTD	2 Marks	8
		Advantage	3 Marks	
		Disadvantages	3 Marks	
OR	iii.	External DTD creation and linking process	4 Marks each (4 Marks*2)	8

Q.4	i.	Schema definition	3 Marks	3
	ii.	Proper explanation	3.5 Marks each (3.5 Marks*2)	7
OR	iii.	Create the XML schema for notebook Linking and validating it with XML file.	3 Marks 4 Marks	7
Q.5	i.	XSL	2 Marks	4
		Layout and templates	2 Marks	
OR	ii.	Proper explanation and output generation.	6 Marks	6
	iii.	Transformation	4 Marks	6
		Example.	2 Marks	
Q.6		Attempt any two:		
	i.	XPath and navigation	2.5 Marks each (2.5 Marks*2)	5
	ii.	XML creation	2 Marks	5
		Validation, schema and XSLT	3 Marks	
	iii.	Predicate use and condition	2.5 Marks each (2.5 Marks*2)	5

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