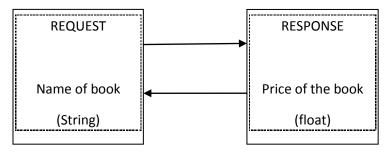
APJ Abdul Kalam Technological University Third Semester M.Tech Degree Examination December 2016 Ernakulam II Cluster COMPUTER SCIENCE AND ENGINEERING Specialization: COMPUTER SCIENCE AND ENGINEERING

05CS 7051- WEB SERVICES (ELECTIVE -V)

Time: 3 hrs. Max				
I a)	Given a hierarchical structure of the XML document.			(6 Marks)
	Employee		Element: Does not include text data	
		Employee	Element: Zero or more times: does no	ot include
	1	Name	Element: Once: Text	
	9	Department	Element: Once: Text	
	8-	Telephone	Element: Once: Text	
	3-	Email	Element: Once: Text	
		Employee Nur	mber Attribute: Integer data:	

Write the XML document for the above structure using DTD and XML Schema definition.

- b) Consider you are developing a web service for 'Travel reservation services (6 Marks) provider' that supports a variety of customers and client applications. What are the architectural concepts that should be considered while developing the web service? Discuss the basic steps of implementing web service.
- II a) An application is developed to obtain book price information from a book catalog (6 Marks) service provider. Describe the anatomy of SOAP request/response message for obtaining book price in the following format:



Client application

Book catalog service provider

- b) You are requested to develop a XML application for getting product information. (6 Marks)
 What is the criterion to be considered while developing SOAP message exchange
 model. Discuss different message exchange patterns that can be used.
- III a) Write a short note on web service life cycle
 - b) A WSDL document 'WeatherInfoService' is created for describing weather (7 Marks) information web service. Discuss the key structural elements in the WSDL definition created.

(4 Marks)

c) "The term binding refers to the process of associating protocol or data format (7 Marks) information with an abstract entity". Examine the support for bindings in the WSDL 1.1 specification.

OR

- IV a) Discuss the data structures that support a business providing services to register (8 Marks) information to enable the discovery of their services and business profile by prospective customers and/or partners.
 - b) In an application a web service requestor is searching for a billing service in the (10 Marks) UDDI registry. Describe API functions that can be used for finding this information.
- V a) Discuss the JAXP standard used to perform parsing on XML documents which is (10 Marks) based on event driven processing model.
 - b) Describe JAXM provider-based communication scenario where JAXM APIs can (8 Marks) be used for creating, sending and receiving messages.

OR

- VI a) Discuss in detail the Java Architecture for XML Binding. (10 Marks)
 - b) List out the key steps in deploying and configuring JAXM-based application. (8 Marks)