



**INSTRUCTIONS:**

1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

**Q.1 Do as directed. [12]**

- (a) Explain followings restrictions on schema definitions: 1) fractionDigits 2) minLength. [02]
- (b) Write segment for referencing schema to xml document. [02]
- (c) Arrange the following distributed computing paradigms according to the level (high to low) of abstraction they provide: [02]  
(a) object request broker (b) Object space (c) remote method invocation, (d) client - server .
- (d) State True or False with Proper Justification: [02]  
**"For given schema it will create two or more child element "child\_name" ".**  
<xs:element name="person"> <xs:complexType> <xs:sequence>  
<xs:element name="child\_name" type="xs:string" minOccurs="2"/>  
</xs:sequence> </xs:complexType></xs:element>
- (e) List out key benefits of using SOA for application development. [02]
- (f) How type casting is performed on Interoperable object reference, obtained from naming service? [02]

**Q.2 Attempt Any Three of following questions. [12]**

- (a) Explain following paradigms : 1) Publish- Subscribe 2) Mobile Agent [04]
- (b) Explain with figure: How CORBA provides platform and Language independency. [04]
- (c) Differentiate between HTML and XML. [04]
- (d) Write restriction for followings: 1) valid Email addresses 2) Ten Digit Mobile Number. [04]

**Q.3 Attempt following questions [12]**

- (a) Write down XML schema definition for Purchase Order for any product with followings. [06]  
i) Writing A Customer supports value like: Name, Address, Email and Contact Number also Product supports value like Product\_Id, Product Name, price.  
Use appropriate Restriction on values.
- (b) Write a CORBA compliant client- server program which provides File Transfer functionality where client sends file name and Server replies with content of given fileName. Also explain significance of all auto generated files and write steps to run the program. [06]

OR

**Q.3 Attempt following questions [12]**

- (a) Write down XML schema definition for following. [06]  
i) Writing A Computer supports values like: Type, RAM, Hard Disk, Monitor, and Price. also  
ii) Computer ListType, where Computer Type supports values: Desktop, Laptop. User appropriate Restriction on values.
- (b) Write a CORBA compliant client- server program which calculates number of characters in given string. Also explain significance of all auto generated files and write steps to run the program. [06]