in developing distributed computing application?  2. What is IPC? What is the role of IPC in distributed computing?  (b) 1. What is SOAP? What is the message format used in SOAP?  2. List out the types of operation supported by WSDL and briefly explain what they are.  (c) 2. (a) 1. State the relative merits and demerits of the various process addressing.  2. Distinguish different RPC communication protocols. Suggest one example where each protocol is used.  (b) What do you mean by Synchronous and Asynchronous operations? Draw and explain event diagrams for all three scenarios of Synchronous send and Asynchronous receive.  (b) What do you mean by web service? Briefly discuss web service protocol hierarchy.  (c) OR  (d) What is RMI? What are the main features of Java RMI? Discuss the various components and the process of RMI execution.  (d) Briefly discuss how a logical connection created and maintained using 07			
		GUJARAT TECHNOLOGICAL UNIVERSITY	
~			_
	•		)
Ti	me:1	30 am to 01:00 pm Total Marks: 70	0
	2.	Make suitable assumptions wherever necessary.	
Q.1	(a)	in developing distributed computing application?	
		2. What is IPC? What is the role of IPC in distributed computing?	
	<b>(b)</b>	1. What is SOAP? What is the message format used in SOAP?	03
		**	04
Q.2	(a)	1. State the relative merits and demerits of the various process addressing.	03
			04
	(b)	xplain event diagrams for all three scenarios of Synchronous send and	07
		OR	
	<b>(b)</b>		<b>07</b>
Q.3	(a)		07
	<b>(b)</b>	riefly discuss how a logical connection created and maintained using datagram socket API.	07
		OR	
Q.3	(a)	What is CORBA? Draw and explain the CORBA architecture of distributed omputing.	<b>07</b>
	<b>(b)</b>	riefly explain the program flow in a connection listener and a connection equester using Socket API.	07

1. What is XML? What are the benefits of it?

defined?

2. What is the structure of XML document? How does the XML structure

1. What do you mean by Object serialization? Why do you need it?

Q.4 (a)

**(b)** 

03

03

04

		2. What do you mean by message oriented middleware? How it differs from RPC?	04
		OR	
Q.4	(a)	<ol> <li>What are differences between DTDs and Schema?</li> <li>What are XML namespaces? Why are they important? Explain with example.</li> </ol>	03 04
	<b>(b)</b>	<ol> <li>What is JMS? What types of messaging provided by JMS?</li> <li>What is ORB? What are the functions of it? List out commercial ORBs.</li> </ol>	03 04
Q.5	(a)	Explain architecture of J2EE. List out java technologies supported by J2EE along with their applications.	07
	<b>(b)</b>	<ol> <li>What is PVM? What machines does PVM run on?</li> <li>Write a short note on cluster computing.</li> </ol>	03 04
		OR	
Q.5	(a)	What are cookies and sessions? How can you use them in Java EE? Compare them.	07
	<b>(b)</b>	<ol> <li>What is MPI? What are the differences between PVM and MPI?</li> <li>Write a short note on grid computing</li> </ol>	03 04

\*\*\*\*\*\*