**VELAMMAL INSTITUTE OF TECHNOLOGY**

**DEPT OF CSE/III YEAR/V SEM/CS3551/DC/MODEL/100 MARKS/ 3 hr/31.10.23/SET B**

**Common to AI&DS/CSE/IT**

**PART-A (5\*2=10 Marks)**

1.Define process, thread and task? **02M Remember (CO1)**

**2.Define cut ,inconsistent cut and consistent cut . 02M Remember (CO1)**

**3. What are the message ordering paradigms? 02M Remember (CO2)**

**4.Define local state and global state . 02M Remember (CO2)**

**5.List the three types of messages for deadlock handling . 02M Remember (CO3)**

**6.Express in diagram the wait for graph(WFG) . 02M Remember (CO3)**

**7.Give the use of piggybacking. 02M Remember (CO4)**

**8.What are the two kinds of checkpoints for checkpoint algorithm? 02M Remember (CO4)**

**9.List out the types of cloud service model? 02M Remember (CO5)**

**10.Define scalability and elasticity. 02M Remember (CO5)**

**PART-B (5\*13=65 Marks)**

**11 a i) Explain difference between message passing and shared memory. 6M Understand (CO1)**

**ii) Discuss primitives for distributed communication. 7M Create (CO1)**

**OR**

**b. Discuss the different trends in distributed systems ? 13M Create(CO1)**

**12. a Explain Lamport’s logical clock algorithm in detail with neat diagrams? 13M Understand (CO2)**

**OR**

**b) i) What is scalar time? Explain properties of scalar time. 7M Remember (CO2)**

**ii) Explain the types of group communications used in distributed system. 6M Understand(CO2)**

**13 a) Explain role of timestamps in determining the order of process access in the algorithm? 13M Understand (CO3)**

**OR**

**b) Explain the Maekawa mutual exclusion algorithm in detail with neat diagram? 13M Understand (CO3)**

**14 a i) Explain strongly consistent set of checkpoints. . 6M Understand(CO4)**

**ii) Discuss coordinated checkpointing algorithm. 7M Create (CO4)**

**OR**

**b Explain the Jaun-Venkatesan Asynchronous check pointing algorithm with a neat diagram?**

**13M Understand (CO4)**

**15 a i) What is cloud computing? Explain advantages and disadvantages of cloud computing.**

**6M Remember (CO5)**

**ii) Define virtualization. Explain full-virtualization and para-virtualization. Discuss difference between full-virtualization and para-virtualization. 7M Remember (CO5)**

**OR**

**b) Explain the private , public and hybrid cloud deployment models? 13M Understand (CO5)**

**PART C (1 x 15 = 15 Marks)**

**16 a)** **Explain the distributed deadlock detetction algorithm in detail? 15M Understand (CO3)**

**OR**

**b) Summarize the Koo-touegcoordinated check pointing algorithm? 15M Create (CO4)**

**Course Incharge Module coordinator HOD/AI DS**

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