

Distributed Computing

(1)

THEORY

UNIT I

- Q1 What is parallel computing benefits over sequential computing?
(SE 2020)
- Q2 What is PRAM model? which PRAM model can be used to execute any PRAM algorithm and How? Subclasses of PRAM in detail
(SE 2020) (SSE 2019) (SE 2019 (4))
- Q3 Describe candidate type architecture model & its properties
(SE 2020) (~~SE 2020~~) (ME 2020)
- Q4 with neat diagram organization of Blue gene/L Also discuss communication existing among processors in sys?
(SE 2020) (ME 2020)
- Q3E common topologies used for interconnection networks with a neat diagram and list properties of CTA?
(ME 2020)
- Q4E Discuss Torus n/w & barrier n/w? (ME 2020)
- Q5 with a neat schematic explain SMP symmetric multiprocessor architecture.
(ME 2020)

Q6 Explain w/ thread programming

Thread

Race condition

False sharing

lock contention

mutation

(ME 2020)

Q7 Differentiate b/w parallel & Distributed comp.
with example? Explain how sys level H/w is achieved
(SSE 2019) (SE 2019) (ME 2019)

Q8 What are parallel system ^{what are} sources of
overhead in parallel programs?
(SSE 2019)

Q9 Describe how pairwise summation computation
can be changed to find maximum element
of an array?
(SSE 2019)

Q10 Describe various soln to counting 3's problem
in an array? with neat diag explain counting 3's
(SE 2019) give comparison of all trials (12)
(ME 2019)

Q11 Explain commonly used memory reference
mechanisms
(SE 2019)

Q12 Describe in brief G/H computers in terms of
diversity of H/w Hardware Explain in detail 6 type
(SE 2019) H/w comp (ME 2019)

Q13 Discuss in detail goals of II programming (2)
(ME 2019)

Q14 Define distributed systems & explain dist. ed. computing models? (6)
(ME 2018) (SSE 2018)

Q15 Compare & contrast n/w & distributed OS? (6)
(ME 2018)

Q16 give examples to explain various reliability semantics used in multicast communication?
(ME 18)

Q17 Explain different type of Transparency. "it advisable to implement highest degree of transparency justify (8)
(ME 2018)

Q18 Discuss implementation of casual ordering semantics in GBCAST protocol of ISIS system (6)
(ME 2018) (SSE 2018)

Q19 With neat diagram client-server addressing techniques (10)

(SSE 2018)

Q20. issues in designing distributed sys (5)
(SSE 2018) (SE 2018)

Q21 goals of DC
(SSE 2018)

Q22 with an example compare blocking &
non blocking primitives of IPC?
(SSE 2018)

Q23 explain
IPC of Mach OS
(SE 2018)

Q24 Explain in detail workstation & processor
pool model?
(SE 2018)

Q25 define distributed systems & 4 unique
features of ds?
(SE 2018)