Code No: RR420504 **Set No. 1**

IV B.Tech II Semester Regular Examinations, Apr/May 2008
PARALLEL PROGRAMMING
(Computer Science & Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Write a short notes on
   (a) Fork
   (b) Join [8+8]
2. Discuss about Race Condition with example. [16]
3. (a) Discuss about in-out Barrier Calls.
   (b) What are the applications of Loop Splitting? [8+8]
4. Differentiate between Forward and Backward Data Dependency. [16]
5. Write a parallel program for searching a number in the given list. [16]
6. Write a parallel program for sorting of n numbers. [16]
7. Derive the system efficiency when implementing Gaussian elimination with the strip partition and the cyclic partition. [D] [16]
8. Explain the Control Structure in Fortran-77. [16]

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Code No: RR420504 **Set No. 2**

IV B.Tech II Semester Regular Examinations, Apr/May 2008
PARALLEL PROGRAMMING
(Computer Science & Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. What are the parameters for increased computational speed? Explain. [16]
2. What is the need of Parallel Programming? [16]
3. (a) Explain about Race Condition. [10]
   (b) What is Scheduling? [6]
4. Describe about Block Scheduling. [16]
5. Explain about the structure of Parallel Programs. [16]
6. Write a parallel program for sorting of n numbers. [16]
7. Derive the system efficiency when implementing Gaussian elimination with the strip partition and the cyclic partition. [D] [16]
8. Explain the Control Structure in Fortran-77. [16]

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Code No: RR420504 **Set No. 3**

IV B.Tech II Semester Regular Examinations, Apr/May 2008
PARALLEL PROGRAMMING
(Computer Science & Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Distinguish between the Sequential Programming and Parallel Programming technology? [16]
2. Give the importance of Self Scheduling. [16]
3. (a) Discuss about in-out Barrier Calls.
   (b) What are the applications of Loop Splitting? [8+8]
4. Explain about Recurrence Relations with example. [16]
5. (a) What is Overhead? [4]
   (b) Explain the overhead with n number of processors. The number n is positive. [12]
6. What is traveling salesperson problem? Explain. [16]
7. Write a parallel program for summation of n-numbers (array). [16]
8. (a) What are the limitations of Parallel Programming? [8]
   (b) What are the Benefits of Parallel Programming? [8]

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Code No: RR420504 **Set No. 4**

IV B.Tech II Semester Regular Examinations, Apr/May 2008
PARALLEL PROGRAMMING
(Computer Science & Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Explain the various types of Parallel Computers. [16]
2. (a) What are the various techniques for loop splitting? [8]
   (b) Explain about Spin Locks. [8]
3. (a) Explain about Race Condition. [10]
   (b) What is Scheduling? [6]
4. Differentiate between Forward and Backward Data Dependency. [16]
5. (a) What is Overhead? [4]
   (b) Explain the overhead with n number of processors. The number n is positive. [12]
6. Write a parallel program for sorting of n numbers. [16]
7. What is the importance of Discrete Event and Discrete Time? [16]
8. Write a parallel program for summation of n numbers in Unix. [16]

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