X

NPTEL

Courses » **VLSI Design Verification and test**

Announcements   **Course**   Ask a Question   Progress   Mentor

Unit 4 - Resource Sharing and Binding in HLS

Course outline

How to access the portal ?

Introduction and Overview of VLSI Design

Scheduling in High-Level Synthesis

Resource Sharing and Binding in HLS

● Resource Sharing and Binding in HLS (Part-1)

● Resource Sharing and Binding in HLS (Part-2)

● Resource Sharing and Binding in HLS (Part-3)

● Resource Sharing and Binding in HLS (Part-4)

● Resource Sharing and Binding in HLS (Part-5)

● Resource Sharing and Binding in HLS (Part-6)

● Resource Sharing and Binding in HLS (Part-7)

○ Quiz : WEEK 3 ASSIGNMENT

WEEK 3 ASSIGNMENT

The due date for submitting this assignment has passed. **Due on 2016-08-15, 23:58 IST.**

Submitted assignment

1) Two operations are compatible when: *1 point*

○ They are non-concurrent or are of the same type.

○ They are concurrent and are of the same type.

○ They are non-concurrent and are of the same type.

○ They are concurrent or are of different types.

No, the answer is incorrect.
Score: 0

Accepted Answers:
They are non-concurrent and are of the same type.

2) Which of the following statements are true: *2 points*

☐ Comparability graph satisfies transitive orientation property.

☐ Vertices in an interval graph are adjacent if corresponding intervals overlap.

☐ A conflict graph is an interval graph if its complement is chordal graph.

☐ Chromatic number of a chordal graph can be obtained in polynomial time.

☐ All of the above.

No, the answer is incorrect.
Score: 0

Accepted Answers:
Comparability graph satisfies transitive orientation property.
Vertices in an interval graph are adjacent if corresponding intervals overlap.
Chromatic number of a chordal graph can be obtained in polynomial time.

3) A basic block consists of the following expression: K = ((x + y) + (y + z)) * ((y + z) + (y * z) +   *2 points*
(z * w)). The latency bound is 4. The minimum number of resource instances required to this basic block
is _____ when '*' and '+' are conflicting.

○ 2

○ 3

○ 4

○ 5

No, the answer is incorrect.
Score: 0

Accepted Answers:

4

4) Two registers in the same register bank can have: *2 points*

- ☐ overlapping life times, but non-overlapping access times.
- ☐ overlapping life times and overlapping access times.
- ☐ non-overlapping life times, but overlapping access times.
- ☐ non-overlapping life times and non-overlapping access times.

No, the answer is incorrect.
Score: 0

Accepted Answers:
overlapping life times, but non-overlapping access times.
non-overlapping life times and non-overlapping access times.

5) Which of the following statements are true: *1 point*

- ☐ Register banks contain MUXs at write ports and DEMUXs at read ports.
- ☐ Two registers in the different banks can be accessed at the same time.
- ☐ MUXs / DEMUXs arbitrate write / read accesses to registers, respectively.
- ☐ All of the above.

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above.

6) A good solution is expected using simulated annealing if: *2 points*

- ☐ the probability of accepting worse solutions is higher at higher temperatures.
- ☐ the probability of accepting better solutions is absolute at all temperatures.
- ☐ the probability of accepting worse solutions is lower at higher temperatures.
- ☐ the probability of accepting worse solutions is higher at lower temperatures.

No, the answer is incorrect.
Score: 0

Accepted Answers:
the probability of accepting worse solutions is higher at higher temperatures.
the probability of accepting better solutions is absolute at all temperatures.

◁ Previous Page   End ▷

Government of India
Ministry of Human Resource Development

Powered by

Google