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:

- They are non-concurrent or are of the same type. 1 point
- 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:

- Comparability graph satisfies transitive orientation property. 2 points
- 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: $K = ((x + y) + (y + z)) * ((y + z) + (y * z) + (z * w))$. 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) Two registers in the same register bank can have:

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

- 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:

- the probability of accepting worse solutions is higher at higher temperatures.
- the probability of accepting worse solutions is lower 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.