QUIZ-II

Instructions:

Please mention registration number and date

Timing details are written on each slide
Total no of questions = 20
Each question carries one mark

23/03/15

DISTRIBUTED OPERATING SYSTEMS

ALL THE BEST

1. The meaning of INVALID state means (20sec)

A. Memory is incorrect; no other cache holds the block.

B. Memory is up-to-date; the block may be in other caches

C. This cache block does not contain valid data.

D. All of the above

2.The meaning of DIRTY state means (15sec)(1) (20sec)

A. Memory is incorrect; no other cache holds the block.
B. Memory is up-to-date; the block may be in other caches
C. This cache block does not contain valid data.
D. All of the above

3. The meaning of CLEAN state means (15sec)(1) (20sec)

A. Memory is incorrect; no other cache holds the block.
B. Memory is up-to-date; the block may be in other caches
C. This cache block does not contain valid data.
D. All of the above

4.What is UTC ?(30sec)

- Universal Coordinated Time

5. The following are the Properties of NUMA Multiprocessors(20sec)

A. Access to remote memory is possible
B. Accessing remote memory is slower than accessing local memory
C. Remote access times are not hidden by caching
D. All of the above

6. Any read to a memory location x returns the value stored by the most recent write operation to x is (20sec)

A. Strict Consistency
B. Sequential Consistency
C. Causal Consistency
D. PRAM Consistency
E. All of the above
F. Only A and C

7.Writes done by a single process are received by all other processes in the order in which they were issued, but writes from different processes may be seen in a different order by different processes(20sec)

A. Strict Consistency
B. Sequential Consistency
C. Causal Consistency
D. PRAM Consistency
E. All of the above
F. Only A and C

8.In **lazy release consistency**, at the time of a release, nothing is sent anywhere(T/F)(15sec)

9. What is Granularity (30sec)

- when a nonlocal memory word is referenced, a chunk of memory containing the word is fetched from its current location and put on the machine making the reference. An important design issue is how big should the chunk be? A word, block, page, or segment (multiple pages).

# 10. What is Munin ?
___(20sec)

Munin is a DSM system that is fundamentally based on software objects, but which can place each object on a separate page so the hardware MMU can be used for detecting accesses to shard objects.

11.This protocol manages cache blocks, each of which can be in one of the following three states (15sec)

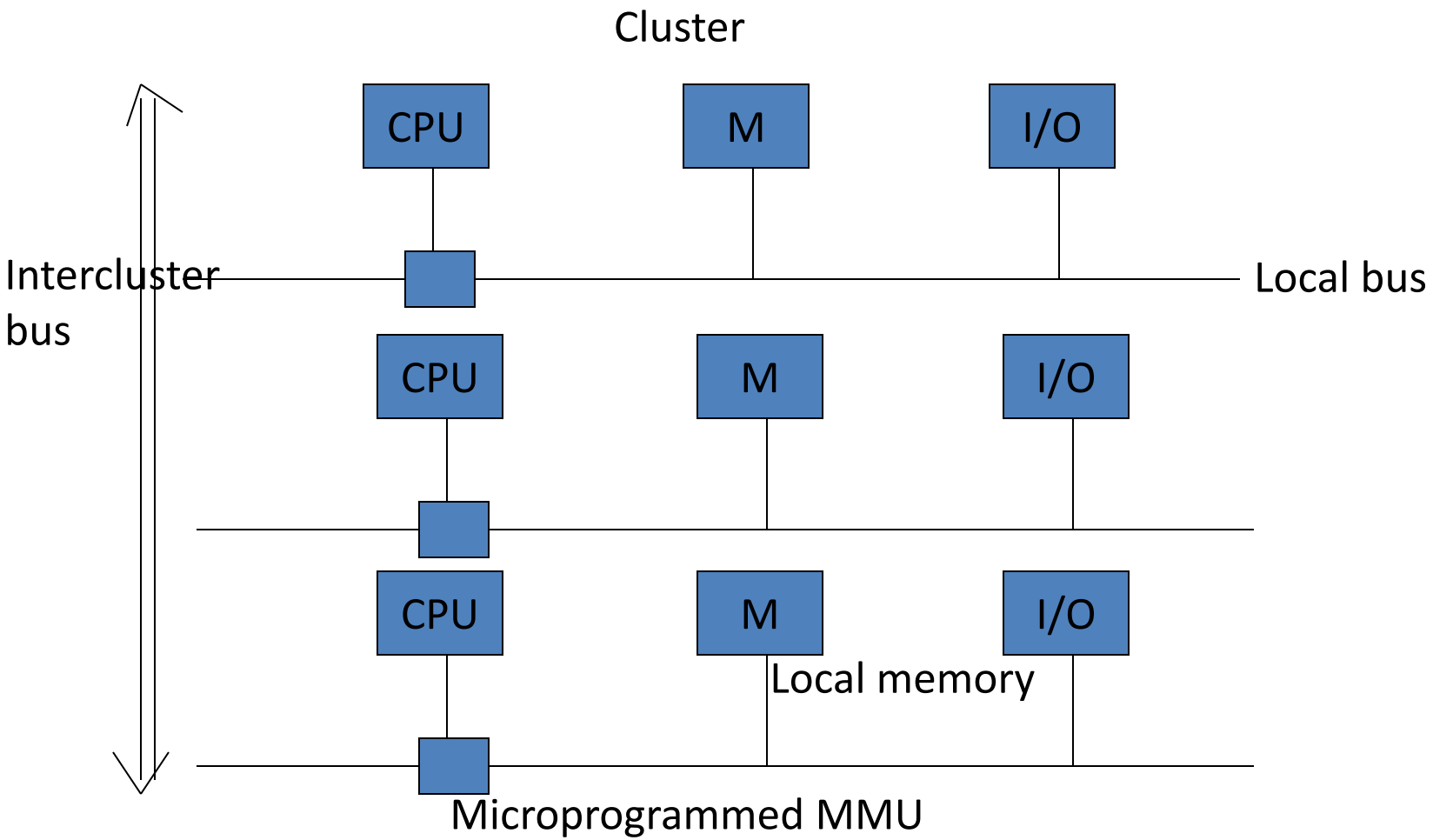
A. Invalid
B. Clean
C. Dirty
D. valid

Centralized Deadlock Detection

12._____ is the mapping between logical and physical objects. (15sec)

1. Naming
2. Location Transparency
3. Transparency
4. All of the above

13. The following diagram is an examples of ? (20Sec) NUMA Multiprocessors- Cm*



14.True file services are (15 sec)

A. Reading
B. Writing
C. Appending
D. All of the above
E. Only A and B

15.What is physical clock ?(30sec)

- When the additional constraints is present that the clocks must not only be the same, but also must not deviate from the real time by more than a certain amount, the clock are called physical clock

16.Duplicating files on multiple machines improves availability and performance. (T/F)(15sec)

17.In Cristian algorithm the time sever is _____(15sec)

A. Passive
B. Active
C. Some internal passive some interval active

18.What are the problems of clock synchronization in distributed operating systems ?(20sec)

A. Processses make decision based only on local information
B. The relevent information is scattered among multiple machines
C. A single point of failure in the system should be avoided
D. No common clock or other precise global time source exists
E. All of the above
F. Only A, B, C

19.What is NUMA and UMA ?(15sec)

- **UMA (Uniform Memory Access)**
- NUMA(NON **Uniform Memory Access**

20.What is TAI ?(15sec)

- International Atomic Time
- International Authority time
- International Auto Time
- International Audit Time

END OF QUIZ-I