Program: BE Computer Engineering

Curriculum Scheme: Revised 2012

Examination: Fourth Year Semester VIII

Course Code: CPC803 and Course Name: Parallel and Distributed Systems

Time: 1hour Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

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| Q1.  | A model of a memory contains a number of independent processors all sharing a single main memory. |
| Option A: | Shared memory multiprocessor |
| Option B: | Multi Processor |
| Option C: | Multi Tasking |
| Option D:  | Shared Memory |
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| Q2. | Modern CPUs are multicore processors and, therefore, consist of a number of independent processing units called as |
| Option A: | Chip |
| Option B: | Parallel Architecture |
| Option C: | Parallel Computing |
| Option D: | Cores |
|  |  |
| Q3. | The divide-and-conquer paradigm improves program  |
| Option A: | Shared memory |
| Option B: | Modularity |
| Option C: | Modules  |
| Option D: | Instruction |
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| Q4. | SIMD processors could belong to the class of  |
| Option A: | Parallel memory multiprocessing system. |
| Option B: | Distributed memory multiprocessing system. |
| Option C: | Core memory multiprocessing system. |
| Option D: | Non Shared memory multiprocessing system. |
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| Q5. | In a pipeline system, each pipeline stage performs a different task, so all processing elements (PEs) usually perform the - |
| Option A: | Parallel task |
| Option B: | Shared Task |
| Option C: | Same task |
| Option D:  | Distributed Task |
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| Q6. | In a pipeline system, each processing elements (PE) has a small memory to store - |
| Option A: | Data and intermediate results |
| Option B: | Parallel Information |
| Option C: | Intermediate Results |
| Option D:  | Shared Data |
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| Q7.  | A Simple SIMD processor is used to implement - |
| Option A: | A matrix – matrix multiplication algorithm. |
| Option B: | pattern matching |
| Option C: | Cloud System |
| Option D:  | Hybrid Pattern |
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| Q8.  | Hardware Architecture where all the processors execute the same instruction on different data is- |
| Option A: | SIMD |
| Option B: | MIMD |
| Option C: | SISD |
| Option D:  | MISD |
|  |  |
| Q9. | Caching is a special form of  |
| Option A: | Shared memory |
| Option B: | De-duplication |
| Option C: | Replication |
| Option D:  | Parallel Computing |
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| Q10.  | Cluster Computing Systems is a types |
| Option A: | Parallel Computer |
| Option B: | Distributed Computer |
| Option C: | SIMD |
| Option D:  | SISD |
|  |  |
| Q11.  | Cluster computing is used for parallel programming in which a single program is run in parallel on |
| Option A: | Multiple machines |
| Option B: | Power Full Machines |
| Option C: | Multiple Shared System |
| Option D:  | Cluster  |
|  |  |
| Q12.  | \_\_\_\_\_\_\_\_\_\_\_\_ is generally handled through the generation of a client stub from an interface definition of what the server has to offer. |
| Option A: | Relocation Transparency |
| Option B: | Access transparency |
| Option C: | Replication transparency |
| Option D: | Fragmentation transparency |
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| Q13. | A server cluster is logically organized into |
| Option A: | One Tiers |
| Option B: | Two Tiers |
| Option C: | Three tiers |
| Option D:  | Four Tiers |
|  |  |
| Q14.  | The Following is the property of distributed server |
| Option A: | Replication |
| Option B: | Stable Server |
| Option C: | Transparence  |
| Option D:  | Migration |
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| Q15. | Due to the absence of shared memory, all communication in distributed systems is based on sending and receiving messages Using |
| Option A: | Server Level |
| Option B: | Distributed  |
| Option C: | Low level |
| Option D:  | Stub level |
|  |  |
| Q16.  | A distributed locking protocol by which a resource can be protected against simultaneous access by a collection of processes that are distributed across |
| Option A: | Multiple Processors |
| Option B: | Multiple Machines |
| Option C: | Multiple Client |
| Option D:  | Multiple Server |
|  |  |
| Q17. | A message is stored by the communication system only as long as the sending and receiving application are executing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | In contrast, with transient communication |
| Option B: | Distributed contrast, with transient communication |
| Option C: | Transient communication |
| Option D: | Intransient communication |
|  |  |
| Q18. | All transport-level communication services offer only |
| Option A: | Transient communication |
| Option B: | Intransient communication |
| Option C: | Protocol |
| Option D:  | HTTP |
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| Q19.  | In communication in distributed systems is the support for sending data to multiple receivers, also known as multicast communication. For many years, this topic has belonged to the \_\_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | Domain of network protocols |
| Option B: | HTTP Protocols |
| Option C: | Application Layered Protocols |
| Option D:  | IP v 4 |
|  |  |
| Q20. | Message Streaming involves sending multiple messages, one after the other, where the messages are related to each other by the order they are sent, because there is a |
| Option A: | Temporal relationship |
| Option B: | Message Passing  |
| Option C: | Binding |
| Option D: | Parallel system |
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| Q21. | When a process on machine *A* calls' a procedure on machine *B,* the calling process on *A* is suspended, and execution of the called procedure takes place on *B.* This method is known as |
| Option A: | IPC |
| Option B: | RPC |
| Option C: | Distributed System |
| Option D:  | Parallel Computing |
|  |  |
| Q22.  | In the RPC , When the message gets back to the client machine, the client's operating system sees that it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the client process |
| Option A: | Messaged |
| Option B: | Addressed |
| Option C: | Client Stub |
| Option D:  | Binding |
|  |  |
| Q23. | We want RPC to be transparent-the calling procedure should not be aware that the called procedure is executing on a different machine or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| Option A: | Vice versa. |
| Option B: | Different client |
| Option C: | Different Stub |
| Option D:  | Both |
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| Q24.  | Whenever an object moves from address space *A* to *B,* it leaves behind a client stub in its place in *A* and installs a server stub that refers to it in *B.* An interesting aspect of this approach is that |
| Option A: | Location Transparence  |
| Option B: | Migration Transparence |
| Option C: | Access Transparence |
| Option D:  | Protocol |
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| Q25. | To synchronize logical clocks, Lamport defined a relation called  |
| Option A: | Happens-before. |
| Option B: | Happens-After |
| Option C: | Logical After |
| Option D:  | Logical before |