

[Dashboard](#) / [My courses](#) / [CISC 611-90- O-2019/Late Spring](#) / [Midterm Exam](#)  
/ [CISC 611: Midterm Exam -- Late Spring 2019](#)

**Started on** Tuesday, May 14, 2019, 8:38 PM

**State** Finished

**Completed on** Tuesday, May 14, 2019, 10:08 PM

**Time taken** 1 hour 30 mins

**Points** 22.00/30.00

**Grade** 73.33 out of 100.00

**Question 1**

Correct

1.00 points out  
of 1.00

In the context of networking, domain names are translated to IP addresses by a simple DHCP request.

Select one:

- ☐ True
- ☒ False ✓

**Question 2**

Correct

1.00 points out  
of 1.00

In the context of operating system support, "a process may only access file data and attributes through system call interface" is an example of encapsulation.

Select one:

- ☒ True ✓
- ☐ False

**Question 3**

Correct

1.00 points out  
of 1.00

In the context of inter-process communication, binary data cannot be represented directly in XML (Extensible Markup Language), because

1.00 points out  
of 1.00

somewhere the embedded binary data will include the representation of a special character such as '<' or '>'.

Select one:

- ☒ True ✓
- ☐ False

**Question 4**

Correct

1.00 points out  
of 1.00

In the context of distributed systems, it is satisfactory to multicast all requests to a group of servers as a way of achieving mobility transparency for clients.

Select one:

- ☐ True
- ☒ False ✓

**Question 5**

Correct

1.00 points out  
of 1.00

In the context of inter-process communication, services at different locations must use different port identifiers to enable access from clients.

Select one:

- ☐ True
- ☒ False ✓

**Question 6**

Correct

1.00 points out  
of 1.00

In the context of operating system support, the sender of remote invocation is not delayed if it uses synchronous message passing.

Select one:

- ☐ True
- ☒ False ✓

**Question 7**

Correct

In the context of distributed systems, the resource sharing occurs in not only data, but also hardware and software.

1.00 points out of 1.00

only data, not also hardware and software.

Select one:

- ☒ True ✓
- ☐ False

**Question 8**

Correct

1.00 points out of 1.00

In the context of networking, broadcasting is hardly feasible for large-scale network such as the Internet. It might just be possible for an intranet, but ought to be avoided for the reasons of overhead.

Select one:

- ☒ True ✓
- ☐ False

**Question 9**

Incorrect

0.00 points out of 1.00

In the context of distributed systems, time synchronization requires RTTs to be repeatedly measured to reduce the latency.

Select one:

- ☒ True ✗
- ☐ False

**Question 10**

Incorrect

0.00 points out of 1.00

In the context of networking, if a router does not find the network id portion of a destination address in its routing table, it dispatches the packet to a default address an adjacent gateway or router that is designated as responsible for routing packets for which there is multiple routing information available.

Select one:

- ☒ True ✗
- ☐ False

**Question 11**

Correct

1.00 points out of 1.00

In the context of operating system support, it would be desirable to copy the forked process's address space contents since all of them are immediately needed.

Select one:

- ☐ True
- ☒ False ✓

**Question 12**

Correct

1.00 points out of 1.00

In the context of inter-process communication, processes usually share data, and sharing a port would require access to common data representing the messages in the queue of the port.

Select one:

- ☐ True
- ☒ False ✓

**Question 13**

Correct

1.00 points out of 1.00

In the context of distributed systems, migration of resources (information objects) oftentimes needs to be necessarily performed to reduce communication delays and balance the load of processing and storage among different servers.

Select one:

- ☒ True ✓
- ☐ False

**Question 14**

Correct

1.00 points out of 1.00

In the context of system models and internetworking, the crawler tasks of a web search engine, which spread the load of tasks across many computers, could build partial indexes to new pages incrementally and then merges them with the active index (including deleting invalid references).

Select one:

- ☒ True ✓
- ☐ False

**Question 15**

Incorrect

0.00 points out of 1.00

In the context of inter-process communication, the introduction of overlay networks reduces the complexity of the Internet architecture to support richer application styles and more effective operations.

Select one:

- ☒ True ✗
- ☐ False

**Question 16**

Correct

1.00 points out of 1.00

In the context of networking, virtual circuit network protocol is not widely used in place of IP of the current Internet due to its overhead of registering circuits.

Select one:

- ☒ True ✓
- ☐ False

**Question 17**

Correct

1.00 points out of 1.00

In the context of networking, the basic TCP buffering algorithm, in comparison with Nagle's algorithm, is more suitable and efficient for interactive applications.

Select one:

- ☐ True
- ☒ False ✓

**Question 18**

Correct

1.00 points out of 1.00

In the context of inter-process communication, Negative Acknowledgement (NAK) is usually not preferred if generally only a small portion of messages are dropped.

Select one:

- ☐ True
- ☒ False ✓

**Question 19**

Correct

1.00 points out of 1.00

In the context of distributed systems, a hierarchic naming scheme usually scales better than a naming scheme that uses linear structures.

Select one:

- ☒ True ✓
- ☐ False

**Question 20**

Incorrect

0.00 points out of 1.00

In the context of operating system support, address space protection and processor privilege settings are used to restrict access to file data and file system data in memory and these provide direct access to storage devices.

Select one:

- ☒ True ✗
- ☐ False

**Question 21**

Correct

1.00 points out of 1.00

In the context of networking, with a connection-oriented protocol such as TCP, all data packets must be received and acknowledged in the order in which they are transmitted.

Select one:

- ☒ True ✓
- ☐ False

**Question 22**

Incorrect

0.00 points out of 1.00

In the context of inter-process communication, a client process can communicate with a server process as long as the IP address of the server is known to the client.

01 1.00

Select one:

- ☒ True ✖
- ☐ False

**Question 23**

Correct

1.00 points out of 1.00

In the context of system models and internetworking, a peer-to-peer system could use replication to ensure the data integrity; and use hash checking to ensure the data availability.

Select one:

- ☐ True
- ☒ False ✔

**Question 24**

Correct

1.00 points out of 1.00

In the context of operating system support, the advantage of implementing a system call as an RPC is that a process can perform operations transparently on either remote or local resources.

Select one:

- ☒ True ✔
- ☐ False

**Question 25**

Incorrect

0.00 points out of 1.00

In the context of system models and internetworking, due to the unbounded message transmission time, no guarantee bound could be given for the difference between two computer clocks unless the network time protocol is available and used to synchronize computer clocks.

Select one:

- ☒ True ✖
- ☐ False

**Question 26**

In the context of system models and internetworking, arbitrary failure could

Correct

1.00 points out of 1.00

In the context of system models and internetworking, arbitrary failure could be masked by omission failure, and the latter is oftentimes considered benign and further could be masked by replication.

Select one:

- ☒ True ✓
- ☐ False

**Question 27**

Correct

1.00 points out of 1.00

In the context of system models and internetworking, multi-tier based design approach is much better for evolution because it is with intrinsic separation of concerns and does not introduce any extra complexities.

Select one:

- ☐ True
- ☒ False ✓

**Question 28**

Incorrect

0.00 points out of 1.00

In the context of networking, packets transmitted through a store-and-forward network travels by a route that is determined statically for each packet.

Select one:

- ☒ True ✗
- ☐ False

**Question 29**

Correct

1.00 points out of 1.00

In the context of system models and internetworking, objects in the file system, e.g., files, directories can be read/written/created/deleted using the rights of the local user who runs the program.

Select one:

- ☒ True ✓
- ☐ False




**Question 30**

Incorrect

0.00 points out  
of 1.00

In the context of operating system support, load-balancing schemes are desired for both heavy and light jobs.

Select one:

- ☒ True 
- ☐ False