

Started on Tuesday, 18 November 2025, 11:30 AM

State Finished

Completed on Tuesday, 18 November 2025, 11:35 AM

Time taken 4 mins 15 secs

Marks 16.00/20.00

Grade **80.00** out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

In TCP, which mechanism ensures that the sender does not overwhelm the receiver?

- a. Flow Control
- b. Congestion Control
- c. Error Control
- d. Slow Start

Question 2

Complete

Mark 1.00 out of 1.00

Internal fragmentation occurs when—

- a. memory is scattered
- b. requested memory is larger than allocated
- c. processes swap too frequently
- d. allocated memory is larger than requested

Question 3

Complete

Mark 1.00 out of 1.00

The main purpose of a semaphore is to—

- a. Increase CPU throughput
- b. Provide process synchronization
- c. Speed up disk access
- d. Allocate memory effectively

Question 4

Complete

Mark 1.00 out of 1.00

What happens if a class has at least one pure virtual function?

- a. It cannot have constructors
- b. It cannot be inherited
- c. It becomes an abstract class
- d. It is automatically instantiated

Question 5

Complete

Mark 1.00 out of 1.00

What is the purpose of a subnet mask?

- a. To identify the MAC address
- b. To determine the IP class
- c. To separate network and host portions of an IP
- d. To encrypt traffic

Question 6

Complete

Mark 1.00 out of 1.00

What is the size of an empty class in C++?

- a. 1 byte
- b. 0 bytes
- c. 2 bytes
- d. Depends on compiler

Question 7

Complete

Mark 1.00 out of 1.00

Which C++ feature allows the same function name but different parameters?

- a. Encapsulation
- b. Function Overloading
- c. Virtualization
- d. Inheritance

Question 8

Complete

Mark 1.00 out of 1.00

Which collection class maintains insertion order?

- a. TreeMap
- b. HashMap
- c. HashSet
- d. LinkedHashMap

Question 9

Complete

Mark 1.00 out of 1.00

Which device operates at the Network Layer?

- a. Switch
- b. Hub
- c. Bridge
- d. Router

Question 10

Complete

Mark 1.00 out of 1.00

Which exception is thrown when a thread is waiting and interrupted?

- a. TimeoutException
- b. IOException
- c. InterruptedException
- d. RuntimeException

Question 11

Complete

Mark 1.00 out of 1.00

Which keyword is used to inherit a class in Java?

- a. inherits
- b. extends
- c. super
- d. implement

Question 12

Complete

Mark 1.00 out of 1.00

Which method is used to start a thread in Java?

- a. execute()
- b. run()
- c. start()
- d. init()

Question 13

Complete

Mark 0.00 out of 1.00

Which of the following is a deadlock prevention technique?

- a. Resource allocation graph
- b. Banker's algorithm
- c. Make processes request all resources at start
- d. Preempt all resources from a process

Question 14

Complete

Mark 1.00 out of 1.00

Which of the following is NOT a feature of Java?

- a. Bytecode execution
- b. Automatic garbage collection
- c. Multiple inheritance through classes
- d. Platform independence

Question 15

Complete

Mark 1.00 out of 1.00

Which of the following is NOT a feature of UDP?

- a. Suitable for real-time applications
- b. Fast transmission
- c. No retransmission
- d. Connection-oriented

Question 16

Complete

Mark 0.00 out of 1.00

Which of the following is true about virtual functions?

- a. They cannot be inherited
- b. They enable runtime polymorphism
- c. They cannot be overridden
- d. Their calls are resolved at compile time

Question 17

Complete

Mark 0.00 out of 1.00

Which operator cannot be overloaded?

- a. +
- b. ()
- c. []
- d. ::

Question 18

Complete

Mark 1.00 out of 1.00

Which process state indicates that the process is waiting for I/O?

- a. Blocked
- b. Running
- c. Ready
- d. New

Question 19

Complete

Mark 1.00 out of 1.00

Which protocol is responsible for converting domain names to IP addresses?

- a. DNS
- b. DHCP
- c. ARP
- d. ICMP

Question 20

Complete

Mark 0.00 out of 1.00

Which scheduling algorithm may lead to starvation?

- a. Priority Scheduling
- b. Round Robin
- c. SJF
- d. FCFS