

<b>Started on</b>	Thursday, 13 November 2025, 12:51 PM
<b>State</b>	Finished
<b>Completed on</b>	Thursday, 13 November 2025, 1:10 PM
<b>Time taken</b>	19 mins 22 secs
<b>Marks</b>	18.00/31.00
<b>Grade</b>	<b>58.06</b> out of 100.00

**Question 1**

Complete

Mark 1.00 out of 1.00

What is the result ?

```
Runnable r = new Runnable() {  
    public void run() {  
        System.out.print("cat");  
    }  
};  
Thread t = new Thread(r) {  
    public void run() {  
        System.out.print("Dog");  
    }  
};  
t.start();
```

- ☒ a. Dog
- ☐ b. Compilation fails
- ☐ c. No output
- ☐ d. Exception
- ☐ e. Cat

**Question 2**

Complete

Mark 1.00 out of 1.00

C++ default argument output?

```
#include <iostream.h>  
void func(int a, bool flag = true) {  
    if (flag == true) {  
        cout << "flag is true a = " << a;  
    } else {  
        cout << "flag is false a = " << a;  
    }  
}  
int main() {  
    func(200, false);  
    return 0;  
}
```

- ☒ a. flag false 200
- ☐ b. flag false 100
- ☐ c. flag true 100
- ☐ d. flag true

**Question 3**

Complete

Mark 0.00 out of 1.00

```
10. interface A { void x() ; }
11. class B implements A { public void x() { } public void y() { } }
12. class C extends B { public void x() { } }
And.
20. java.util.List<A> list = new java.util.ArrayList<A>();
21. list.add(new B());
22. list.add(new C());
23. for(A a : list) {
24.     a.x();
25.     a.y();
26. }
```

Calling a.y() in list of A?

- ☐ a. Compile fail line 23
- ☐ b. Compile fail line 25
- ☐ c. Compile fail line 20
- ☐ d. Compile fail line 21
- ☒ e. No output
- ☐ f. Runtime exception

**Question 4**

Complete

Mark 1.00 out of 1.00

```
1. class Eco {
2.     public static void main(String [] args ) {
3.         Eco e1=new Eco();
4.         Eco e2=new Eco();
5.         Eco e3=new Eco();
6.         e3.e = e2;
7.         e1.e = e3;
8.         e2 = null;
9.         e3 = null;
10.        e2. e = e1;
11.        e1 = null;
12.    }
13.    Eco e;
14. }
```

At what point is only a single object eligible for GC?

- ☐ a. After line 10
- ☐ b. After line 9
- ☐ c. After line 11
- ☐ d. After line 8
- ☒ e. Runtime exception
- ☐ f. Compilation fails

**Question 5**

Complete

Mark 1.00 out of 1.00

```
class Test {
    static String s = "-";
    public static void main(String[] args) {
        try {
            throw new Exception();
        } catch (Exception e) {
            try {
                throw new Exception();
            } catch (Exception ex) {
                s += "ic ";
            }
            throw new Exception();
        } catch (Exception x) {
            s += "mc ";
        } finally {
            s += "mf ";
        }
    } finally {
        s += "of ";
    }
    System.out.println(s);
}
```

Nested try/catch output?

- ☐ a. -ic mf of
- ☐ b. -ic of
- ☐ c. -ic mc of mf
- ☒ d. -ic mc mf of
- ☐ e. -mf of
- ☐ f. -mc mf

**Question 6**

Complete

Mark 0.00 out of 1.00

```
class Test {
    public:
        int a;
        char b;
        virtual int add(int a, int b);
};
```

Size of class Test (virtual + int + char)?

- ☐ a. 8
- ☒ b. 13
- ☐ c. 9
- ☐ d. 5

**Question 7**

Complete

Mark 0.00 out of 1.00

```
1. class A {
2.     public void process() {
3.         System.out.print("A ");
4.     }
5. }
6. class B extends A {
7.     public void process() throws RuntimeException {
8.         super.process();
9.         if (true) throw new RuntimeException();
10.        System.out.print("B");
11.        public static void main(String[] args) {
12.            try {
13.                ((a) new B()).process();
14.            } catch (Exception e) {
15.                System.out.print("Exception ");
16.            }
17.        }
18.    }
19. }
```

What is the output?

- ☐ a. Compile fail line 13
- ☐ b. A Exception
- ☒ c. Compile fail line 9
- ☐ d. A B Exception
- ☐ e. A Exception B
- ☐ f. Exception

**Question 8**

Complete

Mark 1.00 out of 1.00

Application layer service:

- ☐ a. NVT
- ☒ b. All
- ☐ c. File transfer
- ☐ d. Mail

**Question 9**

Complete

Mark 0.00 out of 1.00

Baud rate means:

- ☐ a. None
- ☒ b. Bits per second
- ☐ c. Rate of signal change
- ☐ d. Bytes per second

**Question 10**

Complete

Mark 1.00 out of 1.00

Bluetooth is an example of:

- ☐ a. WAN
- ☐ b. LAN
- ☐ c. VPN
- ☒ d. PAN

**Question 11**

Complete

Mark 1.00 out of 1.00

Data encapsulation order:

- ☒ a. Data, segment, packet, frame, bit
- ☐ b. Data, segment, frame, packet, bit
- ☐ c. Segment, data, packet, frame, bit
- ☐ d. Data, frame, packet, segment, bit

**Question 12**

Complete

Mark 1.00 out of 1.00

Default mask for Class A:

- ☐ a. 255.255.255.255
- ☒ b. 255.0.0.0
- ☐ c. 255.255.0.0
- ☐ d. 255.255.255.0

**Question 13**

Complete

Mark 1.00 out of 1.00

Error detection at data link layer:

- ☐ a. Bit stuffing
- ☒ b. CRC
- ☐ c. Equalization
- ☐ d. Hamming

**Question 14**

Complete

Mark 1.00 out of 1.00

ICMP is used for:

- ☐ a. Addressing
- ☐ b. Forwarding
- ☐ c. None
- ☒ d. Diagnostics

**Question 15**

Complete

Mark 0.00 out of 1.00

Incorrect OSI pair:

- ☐ a. Data link – bit sync
- ☒ b. MAC – channel sharing
- ☐ c. Network – routing
- ☐ d. Transport – end-to-end

**Question 16**

Complete

Mark 1.00 out of 1.00

IP address to test local host?

- ☐ a. 1.0.0.127
- ☐ b. 127.0.0.0
- ☐ c. 255.255.255.0
- ☒ d. 127.0.0.1

**Question 17**

Complete

Mark 1.00 out of 1.00

IPv6 uses 16-byte addresses. If 1 million addresses allocated per picosecond, how long do addresses last?

- ☐ a.  $(2^{16}/10^6)*10^{-12}$
- ☐ b.  $(2^{128}/10^6)$
- ☒ c.  $(2^{128}/10^6)*10^{-12}$
- ☐ d. None

**Question 18**

Complete

Mark 0.00 out of 1.00

Local address of IP is combination of:

- ☐ a. Network + Subnet
- ☐ b. Subnet + Host
- ☐ c. All
- ☒ d. Network + Host

**Question 19**

Complete

Mark 1.00 out of 1.00

MAC address size:

- ☒ a. 48 bits
- ☐ b. 42 bits
- ☐ c. 24 bits
- ☐ d. 36 bits

**Question 20**

Complete

Mark 0.00 out of 1.00

Subnet address of 200.10.5.68/28?

- ☐ a. 200.10.5.56
- ☒ b. 200.10.5.32
- ☐ c. 200.10.5.0
- ☐ d. 200.10.5.64

**Question 21**

Not answered

Marked out of 1.00

The correct statement for a function that takes pointer to a float, a pointer to a pointer to a char and returns a pointer to a pointer to a integer is: `int (*fp)(char *)`

- ☐ a. Pointer to array of chars
- ☐ b. Pointer to pointer
- ☐ c. Function returning pointer
- ☐ d. Pointer to function(char\*)→int

**Question 22**

Complete

Mark 0.00 out of 1.00

The method of communication in which transmission takes place in which transmission both directions but one at a time:

- ☒ a. Full duplex
- ☐ b. Four-wire
- ☐ c. Half duplex
- ☐ d. Simplex

**Question 23**

Complete

Mark 1.00 out of 1.00

Transmission data rate is decided by:

- ☒ a. Physical layer
- ☐ b. Transport layer
- ☐ c. Network layer
- ☐ d. Data link layer

**Question 24**

Complete

Mark 1.00 out of 1.00

Transport layer protocols for real-time multimedia, file transfer, DNS, email:

- ☐ a. TCP, UDP, TCP, UDP
- ☒ b. UDP, TCP, UDP, TCP
- ☐ c. UDP, TCP, TCP, UDP
- ☐ d. TCP, UDP, UDP, TCP



**Question 25**

Not answered

Marked out of 1.00

Unmodulated signal is:

- ☐ a. None
- ☐ b. Baseband
- ☐ c. Carrier
- ☐ d. Primary

**Question 26**

Complete

Mark 1.00 out of 1.00

What is the size of a UDP header?

- ☐ a. 64
- ☐ b. 6
- ☒ c. 8
- ☐ d. 20

**Question 27**

Complete

Mark 1.00 out of 1.00

When host knows physical address but not IP, it uses:

- ☐ a. ICMP
- ☒ b. RARP
- ☐ c. ARP
- ☐ d. IGMP

**Question 28**

Complete

Mark 1.00 out of 1.00

Wireless transmission uses:

- ☐ a. Radio
- ☐ b. Microwave
- ☐ c. Infrared
- ☒ d. All

**Question 29**

Complete

Mark 0.00 out of 1.00

Which finalize() statements are true?

- ☐ a. finalize cannot be called explicitly
- ☐ b. finalize called max once
- ☒ c. super.finalize() auto-called
- ☐ d. Order based on finalizable time
- ☐ e. Object.finalize does nothing

**Question 30**

Not answered

Marked out of 1.00

Which declarations compile with poll()?

- ☐ a. HashSet
- ☐ b. ArrayList
- ☐ c. Queue + PriorityQueue
- ☐ d. List + LinkedList
- ☐ e. TreeSet
- ☐ f. LinkedList

**Question 31**

Not answered

Marked out of 1.00

Which override gives output "b"?

```
import java.io.*;
class Master {
    String doFileStuff() throws FileNotFoundException {
        return "a";
    }
}
class Slave extends Master {
    public static void main(String[] args) {
        String s = null;
        try {
            s = new Slave().doFileStuff();
        } catch (Exception x) {
            s = "b";
        }
        System.out.println(s);
    }
}
```

- ☐ a. throws NumberFormatException, FileNotFoundException
- ☐ b. doFileStuff(int)
- ☐ c. throws IOException
- ☐ d. throws FileNotFoundException
- ☐ e. throws NumberFormatException
- ☐ f. doFileStuff(){return "b";}