

- 3) Which of the following statement is True about the memory blocks?
- a) The stack segment is used to store the program code
 - b) The code segment is used to store global variables
 - c) The heap segment is used for dynamic memory allocation**
 - d) The data segment is used to store the function's data such as local variables

- 4) The role of the operating system is to
- a) Exploits the hardware resources of one or more processors
 - b) Manages secondary memory and I/O devices
 - c) Provides a set of services to system users
 - d) All of the above**

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- 4) The role of the operating system is to
- a) Exploits the hardware resources of one or more processors
 - b) Manages secondary memory and I/O devices
 - c) Provides a set of services to system users
 - ☒ d) All of the above
- 5) The _____ is the heart of the operating system. It interacts with the hardware and most of the tasks like memory management, task scheduling, and file management
- a) Bash
 - b) Shell
 - ☒ c) Kernel

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Exam-1

- 6) Which of the following is correct about Unix/Linux file?
- a) Unix files are ordered in an array structure
 - b) USB disk is considered as a file in Unix
 - c) Unix file names are case in-sensitive
 - d) The root user's home directory is the top-level directory in Unix
- 7) Which of the following commands can be used to change default permissions for files and directories at the time of the creation?
- a) ls seek
 - b) change

b) USB disk is considered as a file in Unix

c) Unix file names are case in-sensitive

d) The root user's home directory is the top-level directory in Unix

7) Which of the following commands can be used to change default permissions for files and directories at the time of the creation?

a) lseek

b) change

c) chperm

☒ d) chmod

8) Which of the following statements is **not True**?

☒ a) The - character alone denotes the root of the filesystem tree

b) All data organized into files

c) All files organized into directories

d) Each file is uniquely identified by the inode

- b) All data organized into files
c) All files organized into directories
d) Each file is uniquely identified by the inode

9) _____ is a non-negative integer number that uniquely identifies an open file in Unix

- a) Permission Mode
b) File Descriptor
c) struct stat
d) Buffer

10) Which of the following describes the **directory permission** below

*Owner: read write execute permission
Group: read permission
World: execute permission*

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Exam-1

11) Which command can be used to create an empty text file if it does not exist?

- a) touch
- b) makedir
- c) head
- d) cat

12)

```
int i;  
double d;
```


11) Which command can be used to create an empty text file if it does not exist?

- a) touch
- b) mkdir
- c) head
- d) cat

12)

```
int i;  
double d;
```

Which of the following is True about $d = \underline{d+i}$?

- a) d will be converted to int
- b) The result will be truncated
- c) i will be converted to double

13) Which of the following is an invalid constant used in fseek() function as 'whence' reference

- a) SEEK_CUR
- b) SEEK_SET
- c) SEEK_BEG
- d) SEEK_END

14) Which of the following operator can be used to access the value at address stored in a pointer variable?

- a) ||
- b) >>
- c) &&
- d) *

- b) SEEK_SET
- c) SEEK_BEG
- d) SEEK_END

14) Which of the following operator can be used to access the value at address stored in a pointer variable?

- a) ||
- b) >>
- c) &&
- d) *

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Exam-1

15) What is the type of the read function's return value?

- a) String
- b) Pointer
- c) Boolean
- d) int

16) Which of the following is **True** about the loops in C Language?

- a) for loop is faster than do-while loop
- b) do-while loop is always executed at least once

- a) String
- b) Pointer
- c) Boolean
- d) int

16) Which of the following is **True** about the loops in C Language?

- a) for loop is faster than do-while loop
- ☒ b) do-while loop is always executed at least once
- c) the continue statement can't be used in do-while loop
- d) while loop is always executed at least once

17) In _____ Memory Allocation, the memory is allocated from the stack.

- a) Dynamic
- b) Bash

d) while loop is always executed at least once

17) In _____ Memory Allocation, the memory is allocated from the stack.

- a) Dynamic
- b) Bash
- ☒ c) Static
- d) Symbolic

18) What will be the output of the following program?

```
int main()  
{  
    int x, y = 5, z = 15;
```


18) What will be the output of the following program?

```
int main()  
{  
    int x, y = 5, z = 15;  
    x = y == z;  
    printf("%d", x);  
    return 0;  
}
```

- a) Runtime Error
- b) 5
- c) 15
- d) 0

19) What will be the output of the following program?

```
int main()  
{  
    int i = 5, j = 10, k = 15;  
    printf("%d ", sizeof(k /= i + j));  
  
    return 0;  
}
```

- a) 1
- b) 15
- c) 13
- d) 4

20) What will be the output of the following program?

```
int main()
{
    const int i = 0;
    printf("%d\n", i++);
    return 0;
}
```

a) 0

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Exam-1

21) Which standard library includes the printf() and scanf() functions?

- a. <time.h>
- b. <stdlib.h>
- c. <stdio.h>
- d. <printer.h>

22) What will be the output of the following program?

```
int main()  
{
```


22) What will be the output of the following program?

```
int main()  
{  
    int i = 1;  
    while( i++<=5 )  
        printf("%d ", i++);  
}
```

- a) 1 3 5
- b) 2 4
- c) 2 4 6
- d) 2

23) What will be the output of the following program?

```
int main()
{
    int a = 4, b, c;
    b = --a;
    c = a--;
    printf("%d %d %d", a, b, c);
    return 0;}
```

3 3 2

2 3 2

3 2 2

2 3 3

25) What will be the output of the following program?

```
int main () {  
    float f = 9.45;  
    int i = f;  
    i += 0.55;  
    f = i;  
    printf("%f", f);  
}
```

- a) 9.0
- b) 10.0
- c) 9.55
- d) 11

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Exam-1

26) What is the correct format specifier to print characters?

- a) %d
- ☒ b) %c
- c) %char
- d) "char"

27) Between gets() and fgets(), which is the safer function?

- a) gets()
- ☒ b) fgets()
- c) They are equally safe

b) fgets()

c) They are equally safe

d) They are equally unsafe

28) Which method is used to convert an integer to a char/string data type?

a) atoi

b) itoa

c) itos

d) int2str

29) Which of the following is the file types in Unix/Linux?

a) Directory files

b) Image files

c) Programming files

d) Log files

c) Programming files

d) Log files

I*

30) How to define a constant integer in C?

a) `constant int a = 10;`

b) `const int a=10;`

c) `c int a=10;`

d) `const integer a=10;`

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Exam-1

True/False Questions. Each question is worth 1 point.

Statement	True	False
31) The size of a char pointer is equal to the size of an integer pointer.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
32) <code>int a[6][5];</code> statement will create an array with 6 columns and 5 rows	<input type="checkbox"/>	<input checked="" type="checkbox"/>
33) C programming language is an Object-Oriented Language	<input type="checkbox"/>	<input checked="" type="checkbox"/>
34) <code>gcc</code> is an interpretation system	<input type="checkbox"/>	<input checked="" type="checkbox"/>
35) <code>lstat</code> is a system call that is used to change the location of the read/write pointer of a file descriptor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

35) lstat is a system call that is used to change the location of the read/write pointer of a file descriptor.

36) Make recompiles all source files all the time to make sure the latest changes implemented correctly.

37) Members of a structure are stored at different addresses, while the members of a union are stored at the same address.

38) Assembly is the only language that we can create a system call.

39) A preprocessor command makes your code compile faster.

40) A compiler converts a high-level language to executable machine code.

41) A library is a source file that contains ready-made functions.

42) C functions cannot call themselves.

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42) C functions cannot call themselves.

43) A struct is a user-defined data type.

44) A union is a user-defined data type.

45) Converting a variable from an int to a float will never affect its value.

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46) Which of the following code allocate memory space from the heap?

- a) `malloc(100*sizeof(int))`
- b) `int a[100]`
- c) `heap int a[100]`
- d) `int *a[100]`

47) What is the result of "1|2|4" in C?

- a) 1

47) What is the result of `"1|2|4"` in C?

- a) 1
- b) 0
- c) 124
- d) 7

48) What are the integer values corresponding to the standard input (`stdin`), standard output (`stdout`), and standard error (`stderr`) respectively?

- a) -1 -2 -3
- b) 1 2 3

- a) 1
- b) 0
- c) 124
- d) 7

48) What are the integer values corresponding to the standard input (stdin), standard output (stdout), and standard error (stderr) respectively?

- a) -1 -2 -3
- b) 1 2 3
- c) 1 2 2
- d) 0 1 2

49) What will the following program return?

```
int add1(int n) {  
    return n + 1;  
}  
  
int main() {  
    int a = 5;  
    add1(a);  
    add1(a);  
    return a;  
}
```

a) 5