Operating System

1) Which of the following is not an operating system?

1. Windows
2. Linux
3. Oracle
4. DOS

Answer: (c) Oracle

Explanation: Oracle is an RDBMS (Relational Database Management System). It is known as Oracle Database, Oracle DB, or Oracle Only. The first database for enterprise grid computing is the Oracle database.

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2) What is the maximum length of the filename in DOS?

1. 4
2. 5
3. 8
4. 12

Answer: (c) 8

Explanation: The maximum length of the filename is 8 characters in the DOS operating system. It is commonly known as an 8.3 filename.

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3) When was the first operating system developed?

1. 1948
2. 1949
3. 1950
4. 1951

Answer: (c) 1950

Explanation: The first operating system was developed in the early 1950's. It was also called a single-stream batch processing system because it presented data in groups.

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4) When were MS windows operating systems proposed?

1. 1994
2. 1990
3. 1992
4. 1985

Answer: (d) 1985

Explanation: The first MS Windows operating system was introduced in early 1985.

---

5) Which of the following is the extension of Notepad?

1. .txt
2. .xls
3. .ppt
4. .bmp

Answer: (a) .txt

Explanation: The .txt file extension is a standard text document extension that contains the unformatted text. It is the default file extension for the notepad.

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6) What else is a command interpreter called?

1. prompt
2. kernel
3. shell
4. command

Answer: (c) shell

Explanation: The command interpreter is also called the shell.

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7) What is the full name of FAT?

1. File attribute table
2. File allocation table
3. Font attribute table
4. Format allocation table

Answer: (b) File allocation table.

Explanation: The FAT stands for File allocation table. The FAT is a file system architecture. It is used in computer systems and memory cards. A FAT of the contents of a computer disk indicates which field is used for which file.

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8) BIOS is used?

1. By operating system
2. By compiler
3. By interpreter
4. By application software

Answer: (a) By operating system

Explanation: BIOS is used by the operating system. It is used to configure and identify the hardware in a system such as the hard drive, floppy drive, optical drive, CPU, and memory.

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9) What is the mean of the Booting in the operating system?

1. Restarting computer
2. Install the program
3. To scan
4. To turn off

Answer: (a) Restarting computer

Explanation: Booting is a process of the restart the computer. After restarting it, there is no software in the computer's main memory.

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10) When does page fault occur?

1. The page is present in memory.
2. The deadlock occurs.
3. The page does not present in memory.
4. The buffering occurs.

Answer: (c) The page does not present in memory.

Explanation: Page faults occur when a process tries to access a block page of the memory and that page is not stored in RAM (Read only memory) or memory.

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11) Banker's algorithm is used?

1. To prevent deadlock
2. To deadlock recovery
3. To solve the deadlock
4. None of these

Answer: (a) To prevent deadlock

Explanation: Banker's algorithm is used to prevent the deadlock condition. The banker algorithm is sometimes called the detection algorithm. It is named the banker algorithm because it is used to determine whether a loan can be granted in the banking system or not.

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12) When you delete a file in your computer, where does it go?

1. Recycle bin
2. Hard disk
3. Taskbar
4. None of these

Answer: (a) Recycle bin

Explanation: When you delete a file on your computer device, it is transferred to your computer system's recycle bin or trash.

---

13) Which is the Linux operating system?

1. Private operating system
2. Windows operating system
3. Open-source operating system
4. None of these

Answer: (c) Open-source operating system

Explanation: The Linux operating system is an open-source operating system made up of a kernel. It is a very safe operating system.

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14) What is the full name of the DSM?

1. Direct system module
2. Direct system memory
3. Demoralized system memory
4. Distributed shared memory

Answer: (d) Distributed shared memory

Explanation: The DSM stands for Distributed Shared Memory.

---

15) What is the full name of the IDL?

1. Interface definition language
2. Interface direct language
3. Interface data library
4. None of these

Answer: (a) Interface definition language

Explanation: The IDL stands for Interface Definition Language. It is used to establish communications between clients and servers in RPC (Remote Procedure Call).

---

16) What is bootstrapping called?

1. Cold boot
2. Cold hot boot
3. Cold hot strap
4. Hot boot

Answer: (a) Cold boot

Explanation: Bootstrapping is also known as the cool boot.

---

17) What is the fence register used for?

1. To disk protection
2. To CPU protection
3. To memory protection
4. None of these

Answer: (c) To memory protection

Explanation: The fence register is used for memory protection on the computer. It is a way to access the memory in the computer.

---

18) If the page size increases, the internal fragmentation is also……?

1. Decreases
2. Increases
3. Remains constant
4. None of these

Answer: (b) Increases

Explanation: None

---

19) Which of the following is a single-user operating system?

1. Windows
2. MAC
3. Ms-Dos
4. None of these

Answer: (c) Ms-Dos

Explanation: The single-user operating system is the operating system in which only one user can access the computer system at a time, and Ms-DOS is the best example of a single-user operating system.

---

20) The size of virtual memory is based on which of the following?

1. CPU
2. RAM
3. Address bus
4. Data bus

Answer: (c) Address bus

Explanation: The size of virtual memory is based on the address bus.

---

21) If a page number is not found in the translation lookaside buffer, then it is known as a?

1. Translation Lookaside Buffer miss
2. Buffer miss
3. Translation Lookaside Buffer hit
4. All of the mentioned

Answer: (a) Translation Lookaside Buffer miss

Explanation: A Translation Lookaside Buffer miss arises when the page table entry needed to translate a virtual address to a physical address is not available in the translation lookaside buffer.

---

22) Which of the following is not application software?

1. Windows 7
2. WordPad
3. Photoshop
4. MS-excel

Answer: (a) Windows 7

Explanation: Windows 7 is not an application software because it is a operating system.

---

23) Which of the following supports Windows 64 bit?

1. Window XP
2. Window 2000
3. Window 1998
4. None of these

Answer: (a) Window XP

Explanation: Windows XP supports the 64-bits. Windows XP is designed to expand the memory address space. Its original name is Microsoft Windows XP Professional x64 and it is based on the x86-64 architecture.

---

24) Which of the following windows does not have a start button?

1. Windows 7
2. Windows 8
3. Windows XP
4. None of these

Answer: (b) Windows 8

Explanation: Windows 8 does not have a start button because it uses the tablet mode, but windows 8.1 has a start button.

---

25) Which of the following operating systems does not support more than one program at a time?

1. Linux
2. Windows
3. MAC
4. DOS

Answer: (d) DOS

Explanation: DOS stands for Disk operating system. Disk operating system is a single-user operating system that does not support more than one program at a time.

---

26) Which of the following is a condition that causes deadlock?

1. Mutual exclusion
2. Hold and wait
3. Circular wait
4. No preemption
5. All of these

Answer: (e) All of these

Explanation: None

---

27) Who provides the interface to access the services of the operating system?

1. API
2. System call
3. Library
4. Assembly instruction

Answer: (b) System call

Explanation: The system call provides an interface for user programs to access the services of the operating system through the API (Application Program Interface).

---

28) Where are placed the list of processes that are prepared to be executed and waiting?

1. Job queue
2. Ready queue
3. Execution queue
4. Process queue

Answer: (b) Ready queue

Explanation: The ready queue is a set of all the processes that processes are ready to execute and wait.

---

29) Who among the following can block the running process?

1. Fork
2. Read
3. Down
4. All of these

Answer: (d) All of these

Explanation: None

---

30) Which of the following does not interrupt the running process?

1. Timer interrupt
2. Device
3. Power failure
4. Scheduler process

Answer: (b) Scheduler process

Explanation: Scheduler process does not interrupt in any running process. Its job is to select the processes for long-term, short-term, and short-term scheduler.

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31) What is Microsoft window?

1. Operating system
2. Graphics program
3. Word Processing
4. Database program

Answer: (a) Operating system

Explanation: Microsoft Windows is an operating system that was developed by Microsoft company. The Microsoft Windows is available in 32-bits and 64-bits in the market.

---

32) Which of the following is group of programs?

1. Accessories
2. Paint
3. Word
4. All of above

Answer: (a) Accessories

Explanation: The windows accessories are a group of programs in the operating system. Windows XP offers many accessories or software that you can use to help with your work. The accessories are not full features programs, but it is useful for a specific task in the operating systems. It provides many programs such as a painting program, a calculator, a word processor, a notepad, and Internet software.

---

33) Which of the following is an example of a Real Time Operating System?

1. MAC
2. MS-DOS
3. Windows 10
4. Process Control

Answer: (d) Process Control

Explanation: Process control is a best example of a Real time operating system.

---

34) Which of the following operating systems do you use for a client-server network?

1. MAC
2. Linux
3. Windows XP
4. Windows 2000

Answer: (d) Windows 2000

Explanation: Windows 2002 operating systems were used to implement a client Server Network. It is a server OS that was developed by Microsoft in April 24, 2002. It includes some features of Windows XP.

---

35) Which windows was introduced to My Computer?

1. Windows 10
2. Windows XP
3. Windows 95
4. Windows 98

Answer: (c) Windows 95

Explanation: Windows 95 was first window to introduced the My Computer.

---

36) What type of commands are required to perform various tasks in DOS?

1. Internal commands
2. External commands
3. Valuable commands
4. Primary commands

Answer: (b) External commands

Explanation: External commands are required to perform various tasks in DOS.

---

37) What is the number of characters contained in the primary name of the file of MS-DOS?

1. Up to 8 characters
2. 3 characters
3. Up to 10 characters
4. None of the above

Answer: (a) Up to 8 characters

Explanation: MS-DOS operating system uses the file system that supports the 8.3 characters. The eight characters are used to the filename, and three characters are used to the extension.

---

38) Which command is used to fetch a group (.doc) of files that have just been deleted?

1. Undelete
2. Undelete/all
3. Undelete *.doc
4. All of above

Answer: (c) Undelete *.doc

Explanation: Undelete *.doc command is used to fetch a group (.doc) of files that have just been deleted.

---

39) Which of the following is system software?

1. Operating system
2. Compiler
3. Utilities
4. All of the above

Answer: (d) All of the above

Explanation: The system software is a type of computer program designed to run hardware and software programs on a computer.

According to some definitions, system software also includes system utilities, system restore, development tools, compilers, and debuggers.

---

40) Which program runs first after booting the computer and loading the GUI?

1. Desktop Manager
2. File Manager
3. Windows Explorer
4. Authentication

Answer: (d) Authentication

Explanation: The authentication program is run first after booting the computer and loading the GUI. Authentication is a process of verifying the person or device. For example, when you log in to Facebook, you enter a username and password.

Set 2

1) What is the use of directory structure in the operating system?

1. The directory structure is used to solve the problem of the network connection in OS.
2. It is used to store folders and files hierarchically.
3. It is used to store the program in file format.
4. All of the these

Answer: (b) It is used to store folders and files hierarchically.

Explanation: In the OS, a directory structure is a container that is used to store folders and files in a hierarchical manner.

---

2) What type of scheduling is round-robin scheduling?

1. Linear data scheduling
2. Non-linear data scheduling
3. Preemptive scheduling
4. Non-preemptive scheduling

Answer: (c) Preemptive scheduling

Explanation: Round-robin scheduling is a preemptive scheduling algorithm in which a specific time is provided to execute each process. This specific time is called time-slice.

---

3) Which conditions must be satisfied to solve a critical section problem?

1. Bounded Waiting
2. Progress
3. Mutual Exclusion
4. All of these.

Answer: (d) All of the these

Explanation: A critical-section is a code segment that can be accessed by a signal mechanism at a given point of time. The segment consists of shared data services that are need to be used by other systems. The critical section problem must satisfy the three conditions: Mutual Exclusion, Bounded Waiting, and Progress.

---

4) Which of the following options is correct about the windows operating system?

1. Windows is a CUI operating system.
2. Windows is based on CUI.
3. Windows is a GUI operating system.
4. None of the these

Answer: (c) Windows is a GUI operating system.

Explanation: Windows is a GUI operating system. Windows OS does not require a command to run. Only one mouse is required to run the windows operating system.

---

5) Which of the following file systems is supported by the windows OS?

1. NTFS
2. FAT32
3. exFAT
4. All of the these

Answer: (d) All of the these

Explanation: The following are the types of file systems that support the Windows operating system, such as NTFS, FAT, exFAT, HFS Plus, and EXT.

---

6) Which of the following keys does the user use to switch between applications running simultaneously in the Windows operating system?

1. FN + TAB
2. ALT + TAB
3. CTRL + TAB
4. SHIFT + TAB

Answer: (b) ALT + TAB

Explanation: The user uses the Alt + Tab button to switch from one window to another in the Windows operating system. Also, the user can use the Ctrl + Tab button to switch from tab to tab in internet explorer.

---

7) Which of the following commands creates an emergency repair disk for Windows NT 4.0?

1. BAT
2. EXE
3. EXE/S
4. ADD/REMOVE program

Answer: (b) RDISK.EXE

Explanation: There are the following steps to repair disk in windows NT 4.0:

Step 1: Go to the search button in windows NT 4.0, then type Command Prompt.

Step 2: Then type "RDISK.EXE" and press enter.

Step 3: Then open a pop-up window. This pop-up window will update the emergency repair disk.

---

8) Which of the following scheduling algorithms is preemptive scheduling?

1. FCFS Scheduling
2. SJF Scheduling
3. Network Scheduling
4. SRTF Scheduling

Answer: (d) SRTF Scheduling

Explanation: Shortest Remaining Time First (SRTF) scheduling is preemptive scheduling. In this scheduling, the process that has the shortest processing time left is executed first.

---

9) How can you get a printout of the system configuration on windows 9x OS?

1. Open the CMD window, type "MSDN", and press <printscrn>
2. From the device manager, click the print button
3. Open the CMD window, type "SYS", and press <printscrn>
4. None of the these

Answer: (c) From the device manager, click the print button

Explanation: Windows 9x is a generic term that refers to a series of Microsoft windows OS from 1995 to 2000. If you want to print out in Windows 9x, go to the device manager and click the printer option and then print the page.

---

10) Which of the following operating system runs on the server?

1. Batch OS
2. Distributed OS
3. Real-time OS
4. Network OS

Answer: (d) Network OS

Explanation: The network operating system runs on a server. This operating system has some functions that work to connect local area networks and computers.

---

11) What type of memory stores data in a swap file on a hard drive?

1. Secondary memory
2. Virtual memory
3. Low memory
4. RAM

Answer: (b) Virtual memory

Explanation: A swap file is a type of file that stores the data retrieved from Read-Only-Memory (RAM) or main memory. It is also a virtual memory because it is not stored in physical RAM.

---

12) Which of the following "semaphore" can take the non-negative integer values?

1. Binary Semaphore
2. Counting Semaphore
3. Real Semaphore
4. All of the these

Answer: (b) Counting Semaphore

Explanation: Counting semaphore takes only the non-negative integer value that is used to solve the critical section problem and process synchronization.

---

13) In which directory the local user profile settings are stored by default in windows 2000?

1. C: \ USERS
2. C: \ NETLOGON
3. C: \ WIN NTUSER.DAT
4. C: \ Documents and settings

Answer: (d) C: \ Documents and settings

Explanation: When a user logs in with an account for the first time, Windows 2000 automatically creates a user's profile in the "Documents and Settings" folder.

---

14) Which of the following operating system does not require a command to run?

1. Kali Linux
2. Windows
3. Unix
4. All of the these

Answer: (b) Windows

Explanation: Windows is a GUI operating system. This operating system does not require a command to run. Only one mouse is required to run this operating system.

---

15) Which method is the best among file allocation methods?

1. Linked
2. Contiguous
3. Indexed
4. None of the these

Answer: (c) Indexed

Explanation: The indexed allocation method is the best file allocation method because it removes the problem of contiguous and linked allocation.

---

16) The operating system work between

1. User and Computer
2. Network and User
3. One user to another user
4. All of the these

Answer: (a) User and Computer

Explanation: The OS is software that acts as an interface between a device and users and is also known as system software.

---

17) What is the paging in the operating system?

1. Memory management scheme
2. Network management scheme
3. Internet management scheme
4. None of the these

Answer: (a) Memory management scheme

Explanation: In the operating system, paging is a memory management scheme (MMS) in which memory is divided into pages of fixed size.

---

18) Which of the following programs is loaded first when starting a computer?

1. Window desktop
2. Network connection program
3. Operating system
4. CMD

Answer: (c) Operating system

Explanation: When the computer is powered on, the first operating system program is loaded into the computer. The OS's job is to control the computer's hardware and help other computer programs work.

---

19) Which of the following backup methods is quickest and requires the least amount of backup space?

1. Complete backups
2. Incremental
3. Differential
4. None of the these

Answer: (b) Incremental

Explanation: Incremental backups take less time and space than differential and complete backups.

---

20) Which of the following is not a type of directory structure?

1. Acyclic-graph directory structure
2. Single-level directory structure
3. Tree directory structure
4. Stack directory structure

Answer: (d) Stack directory structure

Explanation: Acyclic-graph, Single-level, and Tree directory structures are a type of directory structure in the operating system. But the stack is a linear data structure, so option (d) is correct answer.

---

21) Which of the following scheduling algorithm is non-preemptive scheduling?

1. SJF scheduling
2. Round-Robin scheduling
3. SRTF scheduling
4. None of these.

Answer: (a) SJF scheduling

Explanation: Shortest job first scheduling is non-preemptive scheduling. In this scheduling algorithm, the process which takes the least time to complete executes that process first.

---

22) Which of the following scheduling reduces process flow time?

1. FCFS
2. LIFO
3. SJF
4. All of the these

Answer: (b) SJF

Explanation: Shortest job first scheduling is non-preemptive scheduling. In this scheduling algorithm, the process which takes the least time to complete executes that process first.

---

23) Which of the following operating systems require a command to run?

1. Kali Linux
2. Windows
3. Mac OS
4. Single-user operating system

Answer: (a) Kali Linux

Explanation: Kali Linux is a fast operating system as more work is done through the command line in it. This OS is a Debian-based Linux OS.

---

24) How many types of buffer overflow in the operating system?

1. Two
2. Six
3. Seven
4. Five

Answer: (a) Two

Explanation: There are two types of buffer-overflows: heap-based and stack-based.

---

25) In which allocation method does the user size the file before creating the file?

1. Contiguous
2. Linked
3. Indexed
4. None of the these

Answer: (a) Contiguous

Explanation: In the contiguous allocation method, the user has to give the size of the file before creating the file so that the operating system can give contiguous blocks in the disk-based on the size of that file.

26) Which of the following algorithms is used to avoid deadlock?

1. Dynamic Programming algorithm
2. Primality algorithms
3. Banker's algorithm
4. Deadlock algorithm

Answer: (c) Banker's algorithm

Explanation: Banker's algorithm is a deadlock avoidance and resource allocation algorithm. This algorithm was developed by Edger Dijkstra. It is also called a detection algorithm.

---

27) Which of the following component does not belong to PCB (Process Control Block)?

1. CPU registers
2. CPU scheduling information
3. Operating System information
4. Accounting information

Answer: (c) Operating System information

Explanation: The operating system information is not the component of the PCB, so option (d) is the correct answer.

---

28) Which of the following method is used to improve the main memory utilization?

1. Swapping
2. Operating system
3. Memory stack
4. None of these.

Answer: (a) Swapping

Explanation: Swapping is a technique in which the process is removed from the main memory and stored in secondary memory. It is used to improve the main memory utilization.

---

29) Buffer is a _____.

1. Permanent area
2. Temporary area
3. Small area
4. Large area

Answer: (b) Temporary area

Explanation: Buffer is a temporary area where data is stored for some time before being transferred to the main memory.

---

30) Which of the following operating systems supports only real-time applications?

1. Batch OS
2. Distributed OS
3. Real-time OS
4. Network OS

Answer: (c) Real-time OS

Explanation: The real-time OS supports real-time applications. This OS is used for industrial and scientific work. It completes the tasks in a given time.

---

31) Which of the following binary formats support the Linux operating system?

1. 0 and 1
2. Binary Number Format
3. ELF Binary Format
4. None of the these

Answer: (c) ELF Binary Format

Explanation: ELF stands for "Executable-and-Linkable-Format". The ELF format is used for libraries and executable files in Linux operating systems.

---

32) What is Kali Linux?

1. Network device
2. Operating system
3. Server name
4. Computer name

Answer: (b) Operating system

Explanation: Kali Linux is an operating system similar to Windows, Unix, and macOS. Kali operating system was designed for reverse engineering, security, computer forensics, etc.

---

33) Which of the following statement is correct about fragmentation?

1. It is software that connects the OS.
2. It is part of the software.
3. Loss the memory
4. All of the these

Answer: (c) Loss the memory

Explanation: A fragmentation is a state of a hard disk in which the most important parts of a single file are stored at different places in the disk. Due to which there is a loss of memory, and the working efficiency of the operating system is also affected.

---

34) SSTF stands for _____.

1. Shortest Signal Time First
2. Shortest Seek Time First
3. System Seek Time First
4. System Shortest Time First

Answer: (b) Shortest Seek Time First

Explanation: SSTF stands for Shortest-Seek-Time-First. In the SSTF algorithm, that request is executed first, whose seek time is the shortest.

---

35) The PCB is identified by _____.

1. Real-Number
2. Binary Number
3. Store block
4. Integer Process ID

Answer: (d) Integer Process ID

Explanation: PCB is a data structure that is used to store the information of processes. It is identified by an integer process ID (PID).

---

36) Which of the following method is used to prevent threads or processes from accessing a single resource?

1. PCB
2. Semaphore
3. Job Scheduler
4. Non-Contiguous Memory Allocation

Answer: (b) Semaphore

Explanation: Semaphore is an integer variable that is used to prevent threads or processes from accessing a single resource.

---

37) Which of the following mechanisms is a locking mechanism?

1. Semaphore
2. PCB
3. Mutex
4. Binary Semaphore

Answer: (c) Mutex

Explanation: The mutex is a locking mechanism that ensures that only one thread can occupy the mutex at a time and enter the critical section.

---

38) Which of the following statements is correct about virtual memory?

1. It is a combination of the logical-memory and physical-memory
2. It is a separation of user logical memory and physical memory
3. It is a virtual network memory
4. None of the these

Answer: (b) It is a separation of user logical memory and physical memory

Explanation: Virtual memory is used to separate the user's logical memory and actual physical memory. Therefore, option (b) is the correct answer.

---

39) COW stands for _____

1. Compress of write memory
2. Copy overwrite
3. Compress overwrites
4. Computer of world

Answer: (b) Copy overwrite

Explanation: COW stands for Copy-Overwrite. Initially, it allows both the parent and child systems to share the same page.

---

40) Who is responsible for keeping the process from the program?

1. Operating system
2. CPU
3. Monitor
4. All of the these

Answer: (a) Operating system

Explanation: A process is created from a program by the operating system. The OS is software that acts as an interface between a device and users and is also known as system software.
