Operating System MCQs

Part-2

Guide4Xam

http://Guide4Xam.blogspot.com

PART-1

1. The part of machine level instruction, which tells the central processor what has to be done, is

A. Operation code

B. Address

C. Locator

D. Flip-Flop

E. None of the above

Answer: A

2. Which of the following refers to the associative memory?

A. the address of the data is generated by the CPU

B. the address of the data is supplied by the users

C. there is no need for an address i.e. the data is used as an address

D. the data are accessed sequentially

E. None of the above

Answer: C

3. To avoid the race condition, the number of processes that may be simultaneously inside their critical section is

A. 8

B. 1

C. 16

D. 0

E. None of the above

Answer: B

4. A system program that combines the separately compiled modules of a program into a form suitable for execution

A. assembler

B. linking loader

C. cross compiler

D. load and go

E. None of the above

Answer: B

5. Process is

A. program in High level language kept on disk

B. contents of main memory

C. a program in execution

D. a job in secondary memory

E. None of the above

Answer: C

6. Addressing structure

A. defines the fundamental method of determining effective operand addresses

B. are variations in the use of fundamental addressing structures, or some associated actions which are related to addressing.

C. performs indicated operations on two fast registers of the machine and leave the result in one of the registers.

D. all of the above

E. None of the above

Answer: A

7. The Memory Buffer Register (MBR)

A. is a hardware memory device which denotes the location of the current instruction being executed.

B. is a group of electrical circuits (hardware), that performs the intent of instructions fetched from memory.

C. contains the address of the memory location that is to be read from or stored into.

D. contains a copy of the designated memory location specified by the MAR after a "read" or the new contents of the memory prior to a "write".

E. None of the above

Answer: D

8. The strategy of allowing processes that are logically runnable to be temporarily suspended is called

A. preemptive scheduling

B. non preemptive scheduling

C. shortest job first

D. first come first served

E. None of the above

Answer: A

9. The Storage-to-Storage instructions

A. have both their operands in the main store.

B. which perform an operation on a register operand and an operand which is located in the main store, generally leaving the result in the register, expect in the case of store operation when it is also written into the specified storage location.

C. which perform indicated operations on two fast registers of the machine and have the result in one of the registers

D. all of the above

E. None of the above

Answer: A

10. The LRU algorithm

A. pages out pages that have been used recently

B. pages out pages that have not been used recently

C. pages out pages that have been least used recently

D. pages out the first page in a given area

E. None of the above

Answer: C

11. Which of the following systems software does the job of merging the records from two files into one?

A. Security software

B. Utility program

C. Networking software

D. Documentation system

E. None of the above

Answer: B

12. Fork is

A. the dispatching of a task

B. the creation of a new job

C. the creation of a new process

D. increasing the priority of a task

E. None of the above

Answer: C

13. Thrashing

A. is a natural consequence of virtual memory systems

B. can always be avoided by swapping

C. always occurs on large computers

D. can be caused by poor paging algorithms

E. None of the above

Answer: D

14. Supervisor state is

A. never used

B. entered by programs when they enter the processor

C. required to perform any I/O

D. only allowed to the operating system

E. None of the above

Answer: D

15. Which of the following instruction steps, would be written within the diamond-shaped box, of a flowchart?

A. S = B - C

B. IS A<10

C. PRINT A

D. DATA X,4Z

E. None of the above

Answer: B

16. A computer cannot "boot" if it does not have the

A. Compiler

B. Loader

C. Operating system

D. Assembler

E. None of the above

Answer: C

17. Which of the following statements is false?

A. the technique of storage compaction involves moving all occupied areas of storage to one end or other of main storage

B. compaction does not involve relocation of programs

C. compaction is also know as garbage collection

D. the system must stop everything while it performs the compaction

E. None of the above

Answer: B

18. Inter-process communication

A. is required for all processes

B. is usually done via disk drives

C. is never necessary,

D. allows processes to synchronize activity

Answer: D

19. Which of the following functions is(are) performed by the loader

A. allocate space in memory for the programs and resolve symbolic references between object decks

B. adjust all address dependent locations, such as address constants, to correspond to the allocated space.

C. physically place the machine instructions and data into memory.

D. All of the above

E. None of the above

Answer: D

20. User-Friendly Systems are:

A. required for object-oriented programming

B. easy to develop

C. common among traditional mainframe operating systems

D. becoming more common

E. None of the above

Answer: D

21. Which of the following addressing modes, facilitates access to an operand whose location is defined relative to the beginning of the data structure in which it appears?

A. ascending

B. sorting

C. index

D. indirect

E. None of the above

Answer: C

22. While running DOS on a PC, which command would be used to duplicate the entire diskette?

A. COPY

B. DISKCOPY

C. CHKDSK

D. TYPE

E. None of the above

Answer: B

23. Memory

A. is a device that performs a sequence of operations specified by instructions in memory.

B. is the device where information is stored

C. is a sequence of instructions

D. is typically characterized by interactive processing and time-slicing of the CPU's time to allow quick response to each user.

E. None of the above

Answer: B

24. Which of the following rules out the use of GO TO?

A. Flowchart

B. HIPO-DIAGRAMS

C. Nassi-Shneiderman diagram

D. All of the above

E. None of the above

Answer: C

25. A system program that sets up an executable program in main memory ready for execution is

A. assembler

B. linker

C. loader

D. compiler

E. None of the above

Answer: C

PART-2

1. Which of the following are loaded into main memory when the computer is booted?

A. internal command instructions

B. external command instructions

C. utility programs

D. word processing instructions

E. None of the above

Answer: A

2. The FIFO algorithm

A. executes first the job that last entered the queue

B. executes first the job that first entered the queue

C. execute first the job that has been in the queue the longest

D. executes first the job with the least processor needs

E. None of the above

Answer: B

3. What is the name given to the organized collection of software that controls the overall operation of a computer?

A. Working system

B. Peripheral system

C. Operating system

D. Controlling system

E. None of the above

Answer: C

4. The principal of locality of reference justifies the use of

A. reenterable

B. non reusable

C. virtual memory

D. cache memory

E. None of the above

Answer: D

5. The register or main memory location which contains the effective address of the operand is known as

A. pointer

B. indexed register

C. special location

D. scratch pad

E. None of the above

Answer: A

6. Assembly code data base is associated with

A. assembly language version of the program which is created by the code generation phase and is input to the assembly phase.

B. a permanent table of decision rules in the form of patterns for matching with the uniform symbol table to discover syntactic structure.

C. consists of a full or partial list or the token's as they appear in the program. Created by Lexical analysis and used for syntax analysis and interpretation.

D. a permanent table which lists all key words and special symbols of the language in symbolic form.

E. None of the above

Answer: A

7. Thrashing can be avoided if

A. the pages, belonging to the working set of the programs, are in main memory

B. the speed of CPU is increased

C. the speed of I/O processor is increased

D. all of the above

E. None of the above

Answer: A

8. In analyzing the compilation of PL/I program, the term "Lexical analysis" is associated with

A. recognition of basic syntactic constructs through reductions.

B. recognition of basic elements and creation of uniform symbols

C. creation of more optional matrix.

D. use of macro processor to produce more optimal assembly code

E. None of the above

Answer: B

9. Resolution of externally defined symbols is performed by

A. Linker

B. Loader

C. Compiler

D. Assembler

E. None of the above

Answer: A

10. System generation:

A. is always quite simple

B. is always very difficult

C. varies in difficulty between systems

D. requires extensive tools to be understandable

E. None of the above

Answer: C

11. The Memory Address Register

A. is a hardware memory device which denotes the location of the current instruction being executed.

B. is a group of electrical circuits (hardware), that performs the intent of instructions fetched from memory.

C. contains the address of the memory location that is to be read from or stored into.

D. contains a copy of the designated memory location specified by the MAR after a "read" or the new contents of the memory prior to a "write".

E. None of the above

Answer: C

12. In virtual memory systems, Dynamic address translation

A. is the hardware necessary to implement paging

B. stores pages at a specific location on disk

C. is useless when swapping is used

D. is part of the operating system paging algorithm

E. None of the above

Answer: A

13. Fragmentation of the file system

A. occurs only if the file system is used improperly

B. can always be prevented

C. can be temporarily removed by compaction

D. is a characteristic of all file systems

E. None of the above

Answer: C

14. A non-relocatable program is one which

A. cannot be made to execute in any area of storage other than the one designated for it at the time of its coding or translation.

B. consists of a program and relevant information for its relocation.

C. can itself performs the relocation of its address-sensitive portions.

D. all of the above

E. None of the above

Answer: A

15. Which of the following are(is) Language Processor(s)

A. assembles

B. compilers

C. interpreters

D. All of the above

E. None of the above

Answer: D

16. In which addressing mode the effective address of the operand is the contents of a register specified in the instruction and after accessing the operand, the contents of this register is incremented to point to the next item in the list?

A. index addressing

B. indirect addressing

C. auto increment

D. auto decrement

E. None of the above

Answer: C

17. The memory allocation scheme subject to "external" fragmentation is

A. segmentation

B. swapping

C. pure demand paging

D. multiple contiguous fixed partitions

E. None of the above

Answer: A

18. While working with MS-DOS, which command will you use to transfer a specific file from one disk to another?

A. DISKCOPY

B. COPY

C. RENAME

D. FORMAT

E. None of the above

Answer: B

19. What is the name of the operating system for the laptop computer called MacLite?

A. Windows

B. DOS

C. MS-DOS

D. OZ

E. None of the above

Answer: D

20. In which addressing mode the contents of a register specified in the instruction are first decremented, and then these contents are used as the effective address of the operands?

A. index addressing

B. indirect addressing

C. auto increment

D. auto decrement

E. None of the above

Answer: D

21. What is the name given to the values that are automatically provided by software to reduce keystrokes and improve a computer user's productivity?

A. Defined values

B. Fixed values

C. Default values

D. Special values

E. None of the above

Answer: C

22. Page stealing

A. is a sign of an efficient system

B. is taking page frames from other working sets

C. should be the tuning goal

D. is taking larger disk spaces for pages paged out

E. None of the above

Answer: B

23. In MS-DOS 5.0, which is the number that acts as a code to uniquely identify the software product?

A. MS

B. DOS

C. MS DOS

D. 5.0

E. None of the above

Answer: D

24. Bug means

A. A logical error in a program

B. A difficult syntax error in a program

C. Documenting programs using an efficient documentation tool

D. All of the above

E. None of the above

Answer: A

25. Memory management is :

A. not used in modern operating system

B. replaced with virtual memory on current systems

C. not used on multiprogramming systems

D. critical for even the simplest operating systems

E. None of the above

Answer: B

PART-3

1. The initial value of the semaphore that allows only one of the many processes to enter their critical sections, is

A. 8

B. 1

C. 16

D. 0

E. None of the above

Answer: B

2. The Register - to - Register (RR) instructions

A. have both their operands in the main store.

B. which perform an operation on a register operand and an operand which is located in the main store, generally leaving the result in the register, except in the case of store operation when it is also written into the specified storage location.

C. which perform indicated operations on two fast registers of the machine and leave the result in one of the registers.

D. all of the above

E. None of the above

Answer: C

3. A page fault

A. is an error is a specific page

B. occurs when a program accesses a page of memory

C. is an access to a page not currently in memory

D. is a reference to a page belonging to another program

E. None of the above

Answer: C

4. An algorithm is best described as

A. A computer language

B. A step by step procedure for solving a problem

C. A branch of mathematics

D. All of the above

E. None of the above

Answer: B

5. The process of transferring data intended for a peripheral device into a disk (or intermediate store) so that it can be transferred to peripheral at a more convenient time or in bulk, is known as

A. multiprogramming

B. spooling

C. caching

D. virtual programming

E. None of the above

Answer: B

6. Block caches or buffer caches are used

A. to improve disk performance

B. to handle interrupts

C. to increase the capacity of the main memory

D. to speed up main memory read operation

E. None of the above

Answer: A

7. Which of the following statements is false?

A. a small page size causes large page tables

B. internal fragmentation is increased with small pages

C. a large page size causes instructions and data that will not be referenced brought into primary storage

D. I/O transfers are more efficient with large pages

E. None of the above

Answer: B

8. The action of parsing the source program into the proper syntactic classes is known as

A. syntax analysis

B. lexical analysis

C. interpretation analysis

D. general syntax analysis

E. None of the above

Answer: B

9. Which, of the following is not true about the description of a decision table?

A. A decision table is easy to modify

B. A decision table is directly understood by the computer

C. A decision table is easy to understand

D. All of the above

E. None of the above

Answer: B

10. Trojan-Horse programs

A. are legitimate programs that allow unauthorized access

B. do not usually work

C. are hidden programs that do not show up on the system

D. usually are immediately discovered

E. None of the above

Answer: A

11. When did IBM release the first version of disk operating system DOS version 1.0?

A. 1981

B. 1982

C. 1983

D. 1984

E. None of the above

Answer: A

12. Which of the following is false about disk when compared to main memory?

A. non-volatile

B. longer storage capacity

C. lower price per bit

D. faster

E. None of the above

Answer: D

13. Producer consumer problem can be solved using

A. semaphores

B. event counters

C. monitors

D. all of the above

E. None of the above

Answer: D

14. Most of the microcomputer's operating systems like Apple DOS, MS DOS and PC DOS etc. are called disk operating systems because

A. they are memory resident

B. they are initially stored on disk

C. they are available on magnetic tapes

D. they are partly in primary memory and partly on disk

E. None of the above

Answer: B

15. The CPU, after receiving an interrupt from an I/O device

A. halts for a predetermined time

B. hands over control of address bus and data bus to the interrupting device

C. branches off to the interrupt service routine immediately

D. branches off to the interrupt service routine after completion of the current instruction

E. None of the above

Answer: D

16. Seeks analysis

A. is used for analyzing paging problems

B. is used for analyzing device busy problems

C. is used for analyzing control-unit busy problems

D. is only shown on real-time displays

E. None of the above

Answer: B

17. Which is a permanent database in the general model of compiler?

A. Literal Table

B. Identifier Table

C. Terminal Table

D. Source code

E. None of the above

Answer: C

18. What is the name of the technique in which the operating system of a computer executes several programs concurrently by switching back and forth between them?

A. Partitioning

B. Multitasking

C. Windowing

D. Paging

E. None of the above

Answer: B

19. Operating system

A. links a program with the subroutines it references

B. provides a layered, user-friendly interface

C. enables the programmer to draw a flowchart

D. all of the above

E. None of the above

Answer: B

20. Software that measures, monitors, analyzes, and controls real-world events is called:

A. system software

B. real-time software

C. scientific software

D. business software

E. None of the above

Answer: B

21.The details of all external symbols and relocation formation (relocation list or map) is provided to linker by

A. Macro processor

B. Translator

C. Loader

D. Editor

E. None of the above

Answer: B

22. The macro processor must perform

A. recognize macro definitions and macro calls

B. save the macro definitions

C. expand macros calls and substitute arguments

D. all of the above

E. None of the above

Answer: D

23. A development strategy whereby the executive control modules of a system are coded and tested first, is known as

A. Bottom-up development

B. Top-down development

C. Left-Right development

D. All of the above

E. None of the above

Answer: B

24. Which of the following is helpful in evaluating applications software what will best suit your needs?

A. recommendations by other users

B. computer magazines

C. objective software reviews

D. all of the above

E. None of the above

Answer: D

25. What problem is solved by Dijkstra's banker's algorithm?

A. mutual exclusion

B. deadlock recovery

C. deadlock avoidance

D. cache coherence

E. None of the above

Answer: C

PART-4

1. The dispatcher

A. actually schedules the tasks into the processor

B. puts tasks in I/O wait

C. is always small and simple

D. never changes task priorities

E. None of the above

Answer: A

2. System programs such as Compilers are designed so that they are

A. reenterable

B. non reusable

C. serially usable

D. recursive

E. None of the above

Answer: A

3. IBM released its first PC in 1981. Can you name the operating system which was most popular at that time?

A. MS-DOS

B. PC-DOS

C. OS/360

D. CP/M

E. None of the above

Answer: D

4. If the number of bits in a virtual address of a program is 12 and the page size is 0.5 K bytes, the number of pages in the virtual address space is

A. 16

B. 32

C. 64

D. 128

E. None of the above

Answer: D

5. Which table is a permanent database that has an entry for each terminal symbol.

A. Terminal table

B. Literal table

C. Identifier table

D. Reductions

E. None of the above

Answer: A

6. The function(s) of the Syntax phase is(are)

A. to recognize the major constructs of the language and to call the appropriate action routines that will generate the intermediate form or matrix for these constructs.

B. to build a literal table and an identifier table

C. to build a uniform symbol table

D. to parse the source program into the basic elements or tokens of the language.

E. None of the above

Answer: A

7. Swapping

A. works best with many small partitions

B. allows many programs to use memory simultaneously

C. allows each program in turn to use the memory

D. does not work with overlaying

E. None of the above

Answer: C

8. A disk scheduling algorithm in an operating system causes the disk arm to move back and forth across the disk surface in order to service all requests in its path. This is a

A. First come first served

B. Shortest Seek Time First (SSTE)

C. Scan

D. FIFO

E. None of the above

Answer: C

9. A translator is best described as

A. an application software

B. a system software

C. a hardware component

D. all of the above

E. None of the above

Answer: B

10. Data encryption

A. is mostly used by public networks

B. is mostly used by financial networks

C. cannot be used by private installations

D. is not necessary, since data cannot be intercepted

E. None of the above

Answer: B

11. What is the name given to the process of initializing a microcomputer with its operating system?

A. Cold booting

B. Booting

C. Warm booting

D. Boot recording

E. None of the above

Answer: B

12. The function(s) of the Storage Assignment is (are)

A. to assign storage to all variables referenced in the source program.

B. to assign storage to all temporary locations that are necessary for intermediate results.

C. to assign storage to literals, and to ensure that the storage is allocate and appropriate locations are initialized.

D. all of the above

E. None of the above

Answer: D

13. A Processor

A. is a device that performs a sequence of operations specified by instructions in memory.

B. is the device where information is stored

C. is a sequence of instructions

D. is typically characterized by interactive processing and time of the CPU's time to allow quick response to each user.

E. None of the above

Answer: A

14. With MS-DOS which command will divide the surface of the blank floppy disk into sectors and assign a unique address to each one?

A. FORMAT command

B. FAT command

C. VER command

D. CHKDSK command

E. None of the above

Answer: A

15. Multiprogramming

A. is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks.

B. consists of those addresses that may be generated by a processor during execution of a computation.

C. is a method of allocating processor time.

D. allows multiple programs to reside in separate areas of core at the time.

E. None of the above

Answer: D

16. A translator which reads an entire programme written in a high level language and converts it into machine language code is:

A. assembler

B. translator

C. compiler

D. system software

E. None of the above

Answer: C

17. The advantage(s) inherent to using high level languages is (are)

A. Fewer people, less management and shorter transition in learning time

B. Improved debugging capability, and superior documentation

C. A greater degree of machine independence

D. All of the above

E. None of the above

Answer: D

18. Addressing modes

A. defines the fundamental method of determining effective operand addresses

B. are variations in the use of fundamental addressing structures, or some associated actions which are related to addressing.

C. performs indicated operations on two fast registers of the machine and leave the result in one of the registers.

D. all of the above

E. None of the above

Answer: B

19. In which way(s) a macro processor for assembly language can be implemented:

A. independent two-pass processor

B. independent one-pass processor

C. processor incorporated into pass 1 of a standard two-pass assembler

D. all of the above

E. None of the above

Answer: D

20. Which of the following is a type of systems software used on microcomputers?

A. MS-DOS

B. PC-DOS

C. UNIX

D. All of the above

E. None of the above

Answer: D

21. The working set theory of programming behaviour of processes running within an operating system involves

A. the collection of pages that a process accesses

B. disk scheduling mechanisms

C. coalescing holes in memory

D. assigning the CPU to processes

E. None of the above

Answer: A

22. Operating system is

A. A collection of hardware components

B. A collection of input-output devices

C. A collection of software routines

D. All of the above

E. None of the above

Answer: C

23. A file organization component of a VSAM file is:

A. relative record data set

B. keyed sequential data set

C. entry sequential data set

D. all of the above

E. None of the above

Answer: D

24. What is the name given to the software which can be legally compiled and often used for free?

A. Shareware program

B. Public domain program

C. Firmware program

D. Mind ware

E. None of the above

Answer: B

25. The SJF algorithm executes first the job

A. that last entered the queue

B. that first entered the queue

C. that has been in the queue the longest

D. with the least processor needs

E. None of the above

Answer: D