OSC

Session: 1

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

A.   Operatio0n code

B.   Address

C.   Locator

D.   Flip-Flop

 Correct 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

 Correct Answer : C

Sesssion-2

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

Correct 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

Correct Answer : B

Session: 3

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

Correct 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

Correct 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".

Correct 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

Correct 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

Correct Answer : A

Session: 5

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

Correct 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

Correct 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

Correct Answer : C

Session : 6

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

Correct 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

Correct Answer : D

Session:7

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

Correct Answer : B

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

    A.   Compiler

    B.   Loader

C. Operating system

D. Assembler

Correct 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

Correct Answer : C

Session: 8

18. Interprocess communication

A. is required for all processes

B. is usually done via disk drives

C. is never necessary,

D. allows processes to synchronize activity

Correct 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

Correct 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

Correct 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

Correct Answer : C

Session: 9

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

Correct 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.

Correct Answer : B

Session: 10

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

A. assembler

B. linker

C. loader

D. compiler

Correct Answer : C

25. 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

Correct Answer : A

Session: 11

26. 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

Correct Answer : B

Session: 12

27. 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

Correct Answer : A

28. 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".

Correct Answer : C

29. 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

Correct Answer : A

Session: 13

30. 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

Correct Answer : A

31. 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

Correct Answer : B

32. 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

Correct Answer : C

Session :14

33. 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

Correct Answer : C

34. 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

Correct Answer : B

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

A.   mutual exclusion

B.   deadlock recovery

C.   deadlock avoidance

D.   cache coherence

Correct Answer : C

Session : 15
36. 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

Correct Answer : C

37. Link encryption

A.   is more secure than end-to-end encryption

B.   is less secure than end-to-end encryption

C.   can not be used in a public network

D.   is used only to debug

Correct Answer : B

Session: 16

38. Which of the following is not a characteristic of a daisy chaining priority control scheme?

A.   priority is programmable

B.   it is relatively easy to add more devices to the chain

C.   the failure of one device may affect other devices on the chain

D.   the number of control lines is independent of the number of devices on the chain

Correct Answer : A