**Practice Paper for OSC**

1. 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 Ionone of the above

2. 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

3. 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

4. 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

5. 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

6. 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

7. 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

8. 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

9. 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

10. 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

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

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

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

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

15. 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

16. 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

17. Round robin scheduling is essentially the preemptive version of \_\_\_\_\_\_\_\_.   
A.FIFO B.Shortest job first C.Shortes remaining D.Longest time first

18. A page fault occurs A.when the page is not in the memory B.when the page is in the memory   
C.when the process enters the blocked state D.when the process is in the ready state

19. Which of the following will determine your choice of systems software for your computer ?   
A.Is the applications software you want to use compatible with it ?   
B.Is it expensive ?   
C.Is it compatible with your hardware ?   
D.Both 1 and 3

20. Let S and Q be two semaphores initialized to 1, where P0 and P1 processes the following statements wait(S);wait(Q); ---; signal(S);signal(Q) and wait(Q); wait(S);---;signal(Q);signal(S); respectively. The above situation depicts a \_\_\_\_\_\_\_\_\_ .   
A.Semaphore B.Deadlock   
C.Signal D.Interrupt

21. What is a shell ?   
A.It is a hardware component B.It is a command interpreter   
C.It is a part in compiler D.It is a tool in CPU scheduling

22. Routine is not loaded until it is called. All routines are kept on disk in a relocatable load format. The main program is loaded into memory & is executed. This type of loading is called \_\_\_\_\_\_\_\_\_   
A.Static loading B.Dynamic loading   
C.Dynamic linking D.Overlays

23. In the blocked state   
A.the processes waiting for I/O are found B.the process which is running is found

C.the processes waiting for the processor are found D.none of the above

24. What is the memory from 1K - 640K called ?   
A.Extended Memory B.Normal Memory   
C.Low Memory D.Conventional Memory

25. Virtual memory is \_\_\_\_\_\_\_\_\_\_.   
A.An extremely large main memory B.An extremely large secondary memory   
C.An illusion of extremely large main memory D.A type of memory used in super computers.

26. The process related to process control, file management, device management, information about system and communication that is requested by any higher level language can be performed by \_\_\_\_\_\_\_\_\_\_.   
A.Editors B.Compilers   
C.System Call D.Caching

27. If the Disk head is located initially at 32, find the number of disk moves required with FCFS if the disk queue of I/O blocks requests are 98,37,14,124,65,67.   
A.310 B.324   
C.315 D.321

28. Multiprogramming systems \_\_\_\_\_\_\_\_.   
A.Are easier to develop than single programming systems   
B.Execute each job faster   
C.Execute more jobs in the same time   
D.Are used only on large main frame computers

29. Which is not the state of the process ?   
A.Blocked B.Running   
C.Ready D.Privileged

30. The solution to Critical Section Problem is : Mutual Exclusion, Progress and Bounded Waiting.   
A.The statement is false B.The statement is true.   
C.The statement is contradictory. D.None of the above

31. The problem of thrashing is effected scientifically by \_\_\_\_\_\_\_\_.   
A.Program structure B.Program size   
C.Primary storage size D.None of the above

32. The state of a process after it encounters an I/O instruction is \_\_\_\_\_\_\_\_\_\_.   
A.Ready B.Blocked/Waiting   
C.Idle D.Running

33. The number of processes completed per unit time is known as \_\_\_\_\_\_\_\_\_\_.   
A.Output B.Throughput   
C.Efficiency D.Capacity

34. \_\_\_\_\_\_\_\_\_ is the situation in which a process is waiting on another process,which is also waiting on another process ... which is waiting on the first process. None of the processes involved in this circular wait are making progress.   
A.Deadlock B.Starvation   
C.Dormant D.None of the above

35. Which of the following file name extension suggests that the file is Backup copy of another file ?   
A.TXT B.COM   
C.BAS D.BAK

36. Which technique was introduced because a single job could not keep both the CPU and the I/O devices busy?   
A.Time-sharing B.SPOOLing   
C.Preemptive scheduling D.Multiprogramming

37. A critical region   
A. is a piece of code which only one process executes at a time   
B.is a region prone to deadlock   
C.is a piece of code which only a finite number of processes execute   
D.is found only in Windows NT operation system

38. The mechanism that bring a page into memory only when it is needed is called   
A.Segmentation B.Fragmentation   
C.Demand Paging D.Page Replacement

39. PCB =   
A.Program Control Block B.Process Control Block   
C.Process Communication Block D.None of the above

40. FIFO scheduling is \_\_\_\_\_\_\_\_.   
A.Preemptive Scheduling B.Non Preemptive Scheduling   
C.Deadline Scheduling D.Fair share scheduling

41. Switching the CPU to another Process requires to save state of the old process and loading new process state is called as \_\_\_\_\_\_\_\_\_\_.   
A.Process Blocking B.Context Switch   
C.Time Sharing D.None of the above

42. Which directory implementation is used in most Operating System?   
A.Single level directory structure B.Two level directory structure   
C.Tree directory structure D.Acyclic directory structure

43. The Banker¿s algorithm is used   
A.to prevent deadlock in operating systems B.to detect deadlock in operating systems   
C.to rectify a deadlocked state D.none of the above

44. A thread   
A.is a lightweight process where the context switching is low   
Bis a lightweight process where the context swithching is high   
Cis used to speed up paging   
D none of the above

45. \_\_\_\_\_\_ is a high level abstraction over Semaphore.   
A.Shared memory B.Message passing   
C.Monitor D.Mutual exclusion

46. A tree sturctured file directory system   
A.allows easy storage and retrieval of file names B.is a much debated unecessary feature   
C.is not essential when we have millions of files D.none of the above