CS604-Operating System

(Solved MCS's)

LECTURE FROM (23 to 45)

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1.....is the separation of user logical memory from physical memory.

a. physical memory
b. ROM
c. virtual memory pg#185
d. one of the given

2. When the address used in the program gets converted to an actual physical RAM address is called……..

a. Execution
b. loading
c. compiling
d. Address binding pg#151

3. The set of all Logical address generated by a program from ..... of the process.

a. process address space
a. Physical address space pg#155
b. logical address space
c. none of the given

4. 1 KB is equivalent to…..

a. 10 bytes
b. 100 bytes
c. 1000bytes from Google
d. 1024 bytes

5Page replacement algorithm suffers from Belay's anomaly.

a. LIFO
b. FIFO pg#199
c. MRU
d. LRU

6points to the smallest memory address of a process.

a. Limit register
b. Base register pg#10 Base register – it holds the smallest legal physical memory address for a process
c. Stack register
d. None of the given

7. In …… system, the user space contain one process at a time because only one process is executing at given time
a. Multi programmed
b. Batch pg#5
c. Time-sharing system
d. None of the given

8.....wastes CPU cycles and hence a problem in real multiprogramming system.
a. Busy Waiting pg#111
b. Semaphore
c. Critical Section
d. Mutex

9. A new process is called by the.....system call
a. exit
b. fork pg#36
c. wait
d. exec

10. The address generated by the CPU after any indexing or other addressing-mode arithmetic is called ..... address and the address it gets translated by MMU is called ..... address.
a. Virtual, physical pg#153
b. Hexadecimal, Binary
c. Valid, Virtual
d. Physical, Virtual

11.....is single program that produces an object file.
a. Linker
b. Compiler pg#86
c. loader
d. text editor

12. In ..... frame allocation scheme free frames are equally divided among processes.

a. Fixed pg#205 or Fixed Allocation
b. Proportional
c. Priority
d. All of the given

13. Named pipes give .....flow of data by default.

a. half-duplex pg#46
b. full-duplex
c. both half and full duplex
d. none of the above

14.....Is the variation of frok system call in several Unix operating system used for virtual memory.

a. vfrok() pg#194
b. wfrok()
c. afrok()
d. bfrok()

15. In scan algorithm the disk..... starts at one end of the disk, and moves towards other end, servicing requests as it reaches each cylinder, until it gets to the other end of the disk.

a. arm pg#245
b. cylinder
c. head
d. none

16. The problem of Deadlock can be solved by .....method(s).

a. Deadlock prevention
b. Deadlock avoidance
c. Allowing Deadlock
d. All of the given Google

17. In ....., each file is a linked lists blocks may be scattered anywhere on the disk.

a. Indexed Allocation
b. Contiguous Allocation
c. Linked Allocation pg#235
d. none of the above

18.....enables process to communicate with each other.
a. Directory
b. FIFO pg#218
c. Linked File
d. Ordinary File

19. In ..... allocation scheme number of frames allocated to a process is proportional to its size.
a. None of the given
b. Fixed
c. Proportional pg#205
d. Priority

20. If validation bit 0, it indicates a/an ..... state of segment.
a. protected
b. shared
c. legal
d. illegal pg#178

21. In ..... technology, memory is divided into several fixed-size parties.
a. swapping
b. overlays
c. Multiprogramming with Fixed Task(MKT) pg#160
d. Multiprogramming with Variable Task(MVT)

22.....Automatically holds for printer and other non-sharables.
a. Hold and Wait
b. Circular Wait
c. Mutual exclusion pg#132
d. no preemption

23. In ..... page replacement algorithm oldest frame is replaced with another.
a. LIFO
b. FIFO pg#119
c. LRU
d. Optimal

24. When a ..... link is created, a directory entry for the existing file is created.

a. Hard pg#225
b. Soft
c. soft and hard
d. hard or soft

25. In case of thrashing if CPU utilization is too low the operating system ……the degree of multiprogramming.

a. Increase pg#208
b. Decrease
c. Increase or Decease
d. None

26. Which one of the following is correct syntax to copy file 1 to file 2?

a. cp fie2,fie1
b. cp file1/file2 Pg#27
c. cp file2 file1
d. cp file1 file2

27 is/are a memory management scheme that supports programmer's view of memory.

a. paging
b. segmentation pg#176
c. All of the above
d. demand paging

28 keeps in memory only those instructions and data that are needed at any given time.

a. paging
b. swapping
c. overlays pg#156
d. fragmentation

29. The bottom layer in the layer in the layered approached of Operating System is.

a. user interface
b. hardware pg#20
c. kernel
d. none

30. The process of switching from one process to another is called ----------
a. context switching pg#34
b. Scheduling
c. quantum periods
d. latency

31. Assume the logical address space of 16 pages of 1024 word, each mapped into physical memory of 32 frames. Each word consists of 2 bytes. what will be the total number of bits to require for the P (page number)
a. 4 bits pg#166
b. 8 bits
c. 16 bits
d. 32 bits

32. ……is the based on the locality of reference concept at least frequency used page is not on the current locality
a. Least Frequently Used algorithm pg#204
b. Page Buffering Algorithm
c. None
d. Most Frequently Used algorithm

33. Every..... generated by the CPU is divided into two parts a page number (p) and a page offset(d)
a. page
b. process address
c. physical
d. Logical address pg#164

34. High-level synchronization constructor that allows the safe sharing of an abstract data type among concurrent process is called……
a. Read/Write Lock
b. Swap
c. Semaphore
d. Monitor pg#122

35. Preemptive .....scheduling is sometimes called Shortest-remaining-time-first scheduling
a. FCFS(First-Come-First-Served)
b. Round-Rubin
c. Shorted Job First Pg#83

d. Priority

36. Which of the Following is not an Operating System?
a. Linux
b. Unix
c. Windows Xp
d. Database pg#7

37. Operating system enables the user to use the Hardware Resources.
a. True pg#4
b. False

38. Which of the following is NOT a Hardware Resource?
a. CPU
b. OS pg#4
c. I/O Devices
d. Memory

39. Managing Secondary Storage Involves all of the Following except
a. Allocating storage space
b. Deal locating Storage
c. Prevent Overwriting (Page 5)
d. Insure integrity of shared data

40. In Layered approach of OS, Lowest Layer is known as__.
a. Software Layer
b. Hardware Layer pg#21
c. Lower Level Layer
d. None of The Given

41. Mach, Mac OS X Server, QNX, OS/2 and Windows NT are examples of OS Based on
a. Layered
b. Micro Kernel pg#22
c. Virtual Machine
d. None of The Given

42._____determines How to do something.
a. Mechanism pg#24
b. Policy
c. Mechanism and Policy:
d. None of the given

43. User Goal of OS is that It easy to use, reliable, safe and fast.
    a. True pg#24
    b. False

44. A pathname is the list of directories separated by_.
    a. #
    b. $
    c. &
    d. / pg#25

45. The Home Directory for super user in Linux and Unix is
    a. /home
    b. /root pg#27
    c. None of the given

46. ____is a virtual directory in Linux and Unix.
    a. /proc pg#27
    b. /temp
    c. /ver
    d. /boot

47. The procedure "The time at which the process finished working MINUS the arrival time of the process MINUS CPUburst for that process" will help calculate the.
    a. On-preemptive Shortest Job first scheduling.
    b. Preemptive Shortest Job First scheduling. Pg# 85
    c. FCFS
    d. RR Scheduling

48. The number of processes completed per unit time is called____.
    a. Turnaround time
    b. Throughput pg#83
    c. Response time
    d. Dispatch latency

49. If your processor does not have two slots empty in Per Process File Descriptor Table, then your_system callwill fail.
    a. Pipe pg#55
    b. read
    c. write

d. open

50. Linux uses____directory to store system configuration files.
a. /bin
b. /dev
c. /boot
d. /etc pg#26

51. command displays the contents of current working directory.
a. Is pg#28
b. Cs
c. Mv

52. A process consists of _
a. One or more threads
b. Code
c. Data
d. All of the given google

53._____is a solution to the problem of indefinite blockage of low-priority processes.
a. Starvation
b. Deadlock
c. Aging pg#87
d. None of the these

54._____is the basis of queuing theory which is branch of mathematics used to analyze systems involving queuesand servers.

a. Little's Formula pg#96
b. Deterministic modeling
c. Queuing Theory
d. Queuing Analysis

55. POSIX is a standard developed by ANSI
a. IEEE
b. ISO
c. ACM

56. In Unix/ Linux, by default the standard output file is attached to the __
a. File

b. Screen pg#59
c. Printer
d. Scanner

57. The scheduling of are done by the operating system.
a. Kernel threads pg#73
b. User level threads
c. Both kernel and user level thread
d. None of the give option

58._____displays information about the top processes.
a. s
b. Cs
c. Top pg#67
d. Cd

59. All threads within a process share the _____address space.
a. Same
b. Different pg#71

60. A major problem with priority scheduling algorithms is_.
a. Deadlock
b. Aging
c. Starvation pg#86
d. None of the these

61. When process opens its first file explicitly it will get descriptor number _____
a. 1
b. 2
c. 3 google
d. 4

62.Round Robin algorithm is similar toscheduling but preemption is added to switch between processes.
a. Shortest job first
b. Shortest Remaining Time First
c. First Come First Server pg#88
d. None of these

63. DOS is single user operating system.
a. True pg#7
b. False

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64._____is a piece of code in a cooperating process in which the process may updates shared data (variable, file,database, etc.).
a. Critical analysis
b. Critical section Pg#100
c. Critical path
d. Critical code

65. n-process critical section problem can be solved by using
a. The bakery algorithm pg#105
b. Determinizing modeling
c. Analytic evaluation
d. None of above

66.A parent process calling system call will be suspended until children process terminates.
a. wait google
b. fork
c. exit
d. exec

67. OS helps manages the following except
a. Application software
b. Bus speed of the system google
c. Memory
d. Virtual memory

68. The Shortest-Job-First Scheduling algorithm can be
a. Preemptive only
b. non-preemptive only
c. Preemptive or non-preemptive. Pg#85
d. None of the given options

69. First-Come, First-Served (FCFS) is a scheduling algorithm.
a. preemptive
b. Non-preemptive pg#83
c. both preemptive and non- preemptive
d. none of the given options

70.The time it takes for the dispatcher to stop one process and start another running is known as the -------.
a. Dispatch latency pg#82
b. Scheduling

c. Context switching
d. None of the given options

71. You can display all of the signals supported by your system, along with their numbers, by using the----------command
a. <Ctrl-A>
b. fg
c. jobs
d. kill -l pg#69

72. A is an abstract key for accessing a file.
a. File descriptor google
b. Input Redirection
c. Output Redirection
d. FIFO

73. The_____are used for communication between related or unrelated processes on the same system or unrelatedprocesses on different systems.
a. Pipes
b. BSD Sockets pg#53
c. Named pipe (FIFO)
d. None of the given options

74. The creating process is called a ---------- process while the new processes are called the .....of that Process
a. None of the given options
b. Children, parent
c. Parent, children pg#38
d. Zombie, single

75. Files that start with a in UNIX/Linux directory structure are known as hidden files.
a. . (dot) pg#28
b. # (hash)
c. / (slash)
d. ~ (tilt)

76. You can use the command in UNIX to create a directory.
a. rmdir
b. mkdir pg#29

c. cp
d. gcc

77 ---------- has a hierarchical file system structure.
a. DOS
b. Windows
c. UNIX pg#25
d. None of the given options

78. I MB or 1 megabyte is equivalent to----
a. 1024 bytes
b. **1024^2 bytes** Google
c. 1024^3 bytes
d. 1000000 bytes

79. If the fork system call fails, it returns
a. 1
b. -1 pg#40
c. 2
d. 0

80. In____communication the process which wants to communicate with the other process must explicitlyname the recipient and the sender.
a. Direct pg#46
b. Indirect
c. Automatic
d. Self

81. Bounded Buffer is a buffer of____size
a. variable
b. fixed pg#44

82. A Process that has finished working, as well as its parent process has also finished its execution. In this state theprocess A will be called as _____ process.
a. Child
b. Thread
c. Zombie
d. Fork

83. Taking the CPU from one process and giving the CPU to another process is termed as

a. Context switching Google
b. Dispatching
c. Swapping
d. Tracking

84. rm and [r]mkdir commands are used to____directory.
a. Create
b. Move
c. Remove pg#30
d. Modify

85.Utilities used for system administration (halt, ifconfig, fdisk, etc.) are stored indirectory.
a. /dev
b. /boot
c. /lib
d. /sbin pg#27

86. In Linux directory structure, there is_____root directory.
a. 1 pg#26
b. 2
c. 3
d. 4

87. I/O instructions are Privileged Instructions.
a. True pg#12
b. False

88. Command-line interpreter is also called_in some operating systems.
a. Kernel
b. Shell Pg#16
c. Signal
d. API

89. The major advantage of multi-programming system is
a. More than one jobs can be processed at a given time
b. CPU utilization can be increased Pg#8
c. Jobs can be completed quickly
d. All of the options are correct

90. The Operating system is a layer of software between_____and_____
a. Hardware, software application pg#21

b. Kernel, hardware
c. Dos, Windows
d. Windows, Kernel

91. Linux OS can support multiple users at a time
a. True pg#9
b. False

92. _____is also called Swapper.
a. Swap space
b. Medium term scheduler pg#37
c. Short term scheduler
d. Long term scheduler

93. The performance of Round Robin algorithm does NOT depends heavily on the size of the time quantum.
a. True pg#89
b. False

94. _____ Scheduler selects the process from the job pool and put them in main memory.
a. Long term pg#36
b. Short term
c. Medium term
d. Swapper

95. The main characteristic of a Real time system is
a. Efficiency
b. Large Virtual Memory
c. Large secondary storage device
d. **Usability google**

96. A time sharing system is
a. Multitasking
b. Interactive
c. Multi user
d. All of these pg#9

97. You can terminate a foreground process by pressing ----------
a. <Ctrl-A>
b. <Ctrl-C> pg#69
c. <Ctrl-Z>
d. None of the given options

98. You can use the--- command to display the status of suspended and background processes
   a. fg
   b. bg
   c. jobs pg#68
   d. kill

99. The manual pages can be read in Lenux Using ----------command.
   a. man pg#27
   b. wan
   c. desc
   d. help

100. A program in execution is called a____.
   a. Command
   b. Process pg#31
   c. Software
   d. Compiler

101. Current working directory can be accessed using Command.
a. . (dot)
b. # (hash)
c. / (slash)
d. ~ (tilt) pg#25

102. Mkfifo() is a_____.
a. Library Call pg#58
b. Command
c. Directory
d. None of Above

103. _____command gives a snapshot of the current processes.

   a. ps pg#66
   b. top
   c. who
   d. ls

104. Time interval when the I/O Devices are accessed is known as_____.
   a. CPU Burst

b. **IO Burst** google
c. Time Slice
d. None of Above

105. _____Directory includes essential system boot files including the kernel image.
a. /bin
b. /boot pg#26
c. /dev
d. /etc

106. IPC provides a mechanism to allow processes to communicate and to____synchronize their actions without sharingthe same
a. Address space pg#46
b. Address Name
c. Address ID
d. None of all these

107. Each process must first request permission to enter its critical section. The section of code implementing thisrequest is called the _____
a. entry section pg#100
b. Critical Section
c. remainder section
d. None of all these

108. The interval from the time of submission to the time of completion is the
a. Turnaround time pg#83
b. Waiting time
c. Response time
d. None of all these

109. You can create a threads by using the pthread_create() call.
a. True pg#64
b. False

110. Typically the execlp system call is used after a fork system call.

a. True pg#39
b. False

111. A solution to the critical section problem must satisfy the following requirements
a. Progress
b. Mutual exclusion
c. Bounded Waiting
d. All of these pg#101

112. In_____addressing, the recipient is not required to name the sender.
a. Symmetric
b. Asymmetric Pg#47
c. Both symmetric and asymmetric
d. None of the given options

113. The process id returned to the child process after successful fork system call execution is.
a. 0 Pg#40
b. 1
c. 2
d. 3

114. _____command to resume the execution of a suspended job in the foreground
a. fg pg#68
b. bg
c. jobs
d. kill

115. A_____is an integer variable that, apart from initialization is accessible only through two standard atomicoperations: wait and signal.

a. Semaphore pg#111
b. Monitor
c. Critical region
d. Critical section

116. In Resource Allocation Graph, A_____Pi →Rj indicates that process

Pi may request resource Rj at sometime in the future.

a. Claim edge pg#138
b. Request edge
c. Assignment edge
d. Allocation edge

117. In pages segmentation, the logical address is legal if d is_____segment length.

a. < (less then) Pg#180
b. > (greater than)
c. = (equal to)

118. The --------- scheme is not applicable to a resource allocation system with multiple instances of each resource type.

a. Wait for graph Pg#148
b. Resource allocation graph
c. Both Resource-allocation and wait-for graph
d. None of the given options

119. A semaphore that cause Busy-Waiting is termed as_____.

a. Spinlock Pg#113
b. Monitor
c. Critical region
d. Critical section

120. The condition in which a set {P0, P1… Pn} of waiting processes must exist such that P0 is waiting for a resource that is held by P1, P1 is waiting for a resource that is held by P2, and so on, Pn-1 is waiting for a resource held by Pn, and Pn is waiting for a resource held by P0. This condition is known as.

a. Mutual exclusion
b. Hold and wait
c. No preemption
d. Circular wait Pg#131

121. Preventing a condition of_____to happen, deadlocks can be prevented to happen.

a. Critical region
b. Circular wait Pg#136
c. Monitors
d. Critical section

122. What do we name to an address that is loaded into the memory----- address register of the memory?
a. Logical address
b. Physical address Pg#155
c. Binary addresses
d. None of the given options

123. ---------- register contains the size of the process
a. Base register
b. Index register
c. Limit register Pg#13
d. Stack pointers register

124. If the system can allocate resources to each process in some order and still avoid a deadlock then it issaid to be in_____state.
a. Safe Pg#137
b. Un-Safe
c. Mutual
d. Starvation

125. _____Algorithm is used in Deadlock avoidance.
a. Bakery
b. Banker's Pg#139
c. Mutual exclusion
d. Safe Sequence

126. refers to the situation when free memory space exists to load a process in the memory but the spaceis not contiguous.
a. Segmentation
b. Internal fragmentation
c. Swapping
d. External Fragmentation Pg#165

127. The main criteria of page replacement in optimal page replacement algorithm is to

a. Replacement that page will not be use for the longest period of time Pg#199

b. Replacement that page will be required most frequently in the execution of process

c. Replace the page which is biggest in size

128. When the process tries to access locations that are not in memory, the hard traps the operating system. This is called as_____.

a. Page fault Pg#188

b. Page replacement

c. Paging

d. Segmentation

129. The pager is used in connection with_____.

a. Demand paging Pg#186

b. Paging

c. Segmentation

d. Page segmentation

130. Segmentation is a memory management scheme that support___?

a. Programmer's view of memory Pg#175

b. System's view of memory

c. Hardware's view of memory

d. None of the given

131. The segment table maps the___the physical addresses.

a. Page addresses

b. Shared page addresses

c. One-dimensional logical addresses

d. Two-dimensional logical addresses Pg#175

132. _____Point to the page table.

a. Translation look-aside buffers

b. Page offset
c. Page-table length registers (PRLR)
d. Page-table base registers (PTBR) Pg#166

133. _____is used in the detection and recovery mechanism to handle deadlocks.
a. Wait-for graph Pg#144
b. Resource allocation graph
c. Circular graph
d. Claim edge graph

134. Address Binding will be at____in multiprogramming with fixed tasks (MFT)
a. Rub time
b. Load time Pg#160
c. Dynamic time
d. None of the

135. What do we name to an address that is generated by CPU?
a. Logical address Pg#152
b. Physical address
c. Binary address
d. None of the above

136. Secondary storage memory devices have_____memory.
a. Volatile
b. Permanent and nonvolatile google
c. Temporary
d. None of the given

137. The collection of process that is waiting on the disk to be brought into the memory for execution forms the…
a. Input queue Pg#154
b. Output queue
c. Both of the
d. None of the above

138. is a segment of code that accesses a shared resource like data structure or device that must not beconcurrently accessed by more than one thread of execution.
   a. Multithreading
   b. Context switching
   c. Critical section Pg#105
   d. Pipelining

139. Use of semaphore create a problem of busy waiting, this wastes CPU cycles that some other process may beable to use productively. This type of semaphore is also called
   a. Semaphore S
   b. Spinlock Pg#112
   c. Locking
   d. Semaphore Mutex

140. Using hardware solution to synchronization for complex problems, introduce a new synchronization tool known as_____.
a. Test And Set
b. Semaphore Pg#111
c. Swap
d. Trap

141. Batch programs are usually_____programs.
   a. Interactive
   b. Non-interactive Google
   c. Foreground
   d. Preemptive

142. _____Algorithm is used for solving n-process critical section problem.
   a. Bankers
   b. Bakery Pg#105
   c. Babbles
   d. None of the given

143. The integer value of_____semaphores can range over an unrestricted integer domain.

a. Counting Pg#117
b. Binary
c. Mutex
d. Bounded buffer

144. _____is a preemptive scheduling algorithm.

a. First Come First Serve
b. Shortest Job First
c. Round Robin Pg#89
d. None of these

145. The priority of a process can be changed using____command.

a. nice Pg#94
b. cmd
c. Cat
d. Grep

146. Removing the possibility of deadlock in dining philosopher problem does not ensure the problem will not occur.

a. Mutual Exclusion
b. Starvation Pg#123
c. Critical Section
d. Bounded Buffer

147. In producer-Consumer problem synchronization is required. On which shared area this synchronization actually effect.

a. Counter
b. Buffer google
c. Entry section
d. Exit section

148. Typically monitor, a high-level synchronization tool is characterized by___and…

a. Global variable, local

b. variableSignal, wait
c. Local data, programmer defined operators Pg#125
d. Local variables, semaphores

149. Following is not the classical problem of synchronization.
a. Bounded buffer problem
b. Reader writer problem
c. Dining philosophers' problem
d. Counting Semaphore problem Pg#118

150. Consider a scenario in which one process P1 enters in its critical section, no other process is allowed to executein its critical section. This is called _____
a. Mutua exclusion G o o g l e
b. Context switching
c. Multithreading
d. Progress

151. The Swap instruction which is the hardware solution to synchronization problem does not satisfy the condition, hence not considered to be a good solution.
a. Progress
b. Bounded waiting Pg#109
c. Mutual exclusion
d. None of the given

152. The logical address of Intel 80386 is
a. 36 bits
b. 48 bits Pg#185
c. 64 bits
d. 128 bits

153. Intel 80386 used paged segmentation with__level paging.
a. One
b. Two Pg#185
c. Three
d. Four

154. In paged segmentation, we divide every segment in a process into _____pages.

a. Fixed size Pg#182
b. Variable size

155. Which command, Display permissions and some other attributes for prog1.c in your current directory?

a. ls –l prog1.c Pg#234
b. ls –d prog1.c
c. ls file prog1.c
d. ls –l prog1.c /Directory

156. The_____requires that once a writer is ready, that writer performs its write as soon as possible , if a writerwaiting to access the object, no new readers may start reading.

a. first readers-writers problem
b. second readers-writers problem Pg#119
c. third readers-writers problem
d. fourth readers-writers problem

157. Banker's algorithm is used for----------

a. Deadlock avoidance Pg#140
b. Deadlock detection
c. Deadlock prevention
d. Deadlock removal

158. The basic purpose of____is to help the users to utilize the hardware resources for completingdifferent tasks in a simplified manner

a. Operating system Pg#6
b. Application software
c. All Software
d. All of the given

159. _____is used to store data on secondary storage device, e.g., a source program(in C), an executableprogram.

a. Block Special File
b. Link File
c. Ordinary File Pg#220
d. Directory

160. indicates size of the page table

a. translation look-aside buffers
b. Page-table length register (PTLR) Pg#169
c. Page-table base register (PTBR)
d. Page offset

161. The set of all physical addresses corresponding to the logical addresses is a of the process

a. Physical address space Pg#155
b. Process address space
c. None of the given options
d. Logical address space

162. Deadlocks can be described more precisely in terms of a directed graph called a system ----------

a. Directed graph
b. Critical path
c. **Resource allocation graph** Google
d. Mixed graph

163. With---------- you use condition variables.

a. Semaphores
b. Read/Write Locks
c. Swaps
d. Monitor Pg#126

164. buffer places no practical limit on the size of the buffer

a. Bounded

b. Unbounded Pg#44)

c. Both Unbounded & bounded

d. None of the given options

165. spend more time doing IO than computations

a. short CPU bursts

b. CPU bound processes

c. IO bound processes Pg#32

d. None of the given options

166. You can display the contents (names of files and directories) of a directory in UNIX/Linux directory structurewith the command.

a. l

b. s

c. ls Pg#28)

d. none of the given options

167. The critical section problem can be solved by the following except

a. Software based solution

b. Firmware based solution Pg#101

c. Operating system based solution

d. Hardware based solution

168. A modification of free-list approach in free space managment is to store the addresses of n free blocks in thefirst free block. Known as_.

a. counting

b.linked list

c. bit vector

d.grouping Pg#243

169. In deadlock detection and recovery algorithm, a deadlock exists in the system if and only if the wait for graphcontains a _____

a.Cycle Pg#147

b.Graph

c. Edge
d. Node

170. In_____page replace algorithm we will replace the page that has not been used for the longestperiod of time.
a. counter based
b. Least Frequently Used
c. FIFO
d. LRU Pg#202

171. **Overlays are implemented by the _____**
a. Operating system
b. Programmerpg#159
c. Kernel
d. Shell

172. If a process continues to fault, replacing pages, for which it then faults and brings back in right away. This highpaging activity is called.
a. paging
b. thrashing Pg#210
c. page fault
d. CPU utilization

173. The_____method requires each file to occupy a set of contiguous blocks on the disk.
a. Contiguous Allocation pg#236
b. Linked Allocation
c. Indexed Allocation
d. None of the given options

174. a way to establish a connection between the file to be shared and the directory entries of the userswho want to have aces to this file.
a. Link pg#231
b. Directory
c. Common Group

d.Access Permission

175. _____is used to request the OS by the process to take an I/O or initiating child process.
a. System call
b. Interrupt
c. Trap
d. Signal

176. You can use the mv file1 file2 command to move _____
a. file1 to file2.
b. file 2 to file 1
c. this command will not work for moving files
d. None of the option is correct.

177. _____commands in Linux is used to copy file
a. Is
b. cp
c. mv
d. mkdir

178. User mode can run the Privileged instructions.
a. True
b. False

179. The manual pages can be read in Linux using _____command.
a. man
b. wan
c. desc
d. help

180. Swapper is also termed as Short term scheduler.
a. 1
b. 0

181. First_____ entries in Per Process File Descriptor Table are used as soon as the process is created.
a. 1
b. 2
c. 3
d. 4

182. Shared libraries and kernel modules are stored in_____directory.

a. /bin
b. /dev
c. /boot
d. /lib

183. The_____system call suspends the calling process.

a. fork
b. wait pg#42
c. exec
d. exit

184. The hardware mechanism that enables a device to notify CPU is called an ___

a. Interrupt google
b. Signal
c. Trap
d. Process

185. A _____(or an *exception)* is a software-generated interrupt caused either by an error (division by zero or invalid memory access) or by a user request for an operating system service

a. Interrupt
b. Trap (Page 7)
c. Signal
d. Process

186. Which register holds the smallest legal physical memory address for a process?

a. Base register (Page 13)
b. Limit register
c. Status register
d. None of the given options

187. The ----------semaphore provides mutual exclusion for accesses to the buffer pool and is initialized to the value 1.

a. **mutex (Page 118)**
b. binary
c. couting
d. none of the given options

188. Binary semaphores are those that have only two values---------
a. 0 and n
b. 0 and 0
c. 0 and 1 (Page 117)
d. None of the given options

189. Addresses generated *relative* to part of program, not to start of physical memory are
a. Virtual
b. Physical
c. Relocatable
d. Symbolic

190. Object files and libraries are combined by a---------- program to produce the executable binary
a. Compiler
b. Linker
c. Text editor
d. Loader

191. Physical memory is broken down into fixed-sized blocks, called------- and Logical memory is divided into blocks of the same size, called ----------
a. Frames, pages (Page 165)
b. Pages, Frames
c. Frames, holes
d. Holes, segments

192. A page table needed for keeping track of pages of the page table is called _____
a. 2-level paging
b. Page directory (Page 173)
c. Page size
d. Page table size

193. Each page is a power of -------- bytes long in paging scheme.
a. 2
b. 3
c. 4 (Page 167)
d. 5

194. Which part of the computer system helps in managing the file and memory management system?

a. Operating System (Page 5)
b. Device Drivers
c. Application Software
d. Hardware

195. Which of the following is correct definition for wait operation?

a. **wait(S) { (Page 111)**
while(S<=0)
;// no op
S--;
}

b. wait(S) {
S++;
}

c. wait(S) {
while(S>=0)
;// no op
S--;
}

d. wait(S) {
S--;
}

196. Wrong use of wait and signal operations (in context with semaphores) can cause_____problem(s).

a. Mutual Exclusion
b. Deadlock
c. Bounded Waiting
d. All of the given options are correct

197. If a system is not in a safe state, there can be no deadlocks.

a. True
b. False (Page 137)

198. An acyclic graph does not allow directories to have shared

subdirectories and files.

a. True
b. False (Page 225)

199. The size of pages and frames are same in logical memory and physical memory respectively.

a. True (Page 165)
b. False

200. Intel is basically designed for following Operating Systems except _____.

a. MULTICS (Page 182)
b. OS/2
c. Windows
d. Linux

201. Following is NOT true about Virtual memory.

a. Virtual memory help in executing bigger programs even greater in size that of main memory.
b. Virtual memory makes the processes to stuck when the collective size of all the processes becomes greater than the size of main memory.
c. Virtual memory also allows files and memory to be shared by several different processes through page sharing.
d. Virtual memory makes the task of programming easier because the programmer need not worry about the amount of physical memory,

202. The execution of critical sections must NOT be mutually exclusive

a. True
b. False (Page 100)

203. The integer value of _____semaphores can not be greater than 1.

a. Counting
b. Binary (Page 117)
c. Mutex
d. Bounded buffer

204. Starvation is infinite blocking caused due to unavailability of resources.

a. True (Page 115)
b. False

205. Progress and Bounded Waiting are some of the characteristics to solve the critical section problems.
a. True (Page 101)
b. False

206. The_____ requires that no reader will be kept waiting unless a writer has already obtained permission to use the shared object.
a. first readers-writers problem (Page 119)
b. second readers-writers problem
c. third readers-writers problem
d. fourth readers-writers problem

207. The process of holding at least one resource and waiting to acquire additional resources that are currently being held by other processes is known as_____.
a. Mutual exclusion
b. Hold and wait (Page 131)
c. No preemption
d. Circular wait

208. The condition where a set of blocked processes each holding a resource and waiting to acquire a resource held by another process in the set, is termed as_____.
a. Deadlock (Page 130)
b. Starvation

209. A program cannot execute unless whole or necessary part of it resides in the main memory.
a. True
b. False

210. In the C-Scan and C-Look algorithms, when the disk head reverses its direction, it moves all the way to the other end, without serving any requests, and then reverses again and starts serving requests.
a. True (Page 249)
b. False

211. The following requirement for solving critical section problem is known as_____.

"There exists a bound on the number of times that other processes are allowed to enter their critical sections after a process has made a request to enter its critical section and before that request is granted."

a. Progress
b. Bounded Waiting (Page 101)
c. Mutual Exclusion
d. Critical Region

212. The section of code after the critical section is called_____.

a. Crystal section
b. **Entry section**
c. Remainder section
d. Exit section

213. A process is said to be in critical section if it executes code that manipulates shared data.

a. True (Page 100)
b. False

214. _____an integer variable accessible through wait and signal which are atomic operations.

a. Semaphore (Page 111)
b. Mutex
c. Busy waiting
d. Signal

215. Software solution to critical section problem can run only in environment _____.

a. Multiprocessor
b. Multithreading
c. Uniprocessor
d. Separate address spacing

216. _____integer shows the highest priority of a process in CPU scheduling

a. Small (Page 86)
b. Large

217. Cache is non-volatile memory.

a. True
b. False (Page 153)

218. _____is used due to un-used space in fixed size blocks/ pages.
a. **Internal fragmentation**
b. External fragmentation
c. Paging
d. MVT

219. Fragmentation when using ICMP for path MTU should be avoided.
a. **True**
b. False

220. Variable name are_____address.
a. Physical
b. Reloadable
c. Relative
d. Symbolic

221. _____is caused due to un-used in physical memory.
a. Internal fragmentation
b. External fragmentation
c. Paging
d. MVT

222. The run-time mapping from virtual to physical address is done by a piece of hardware in the CPU, called the_____
a. Memory management unit (MMU) (Page 155)
b. CPU scheduler
c. Registers
d. None of the above

223. Main memory is_____memory.
a. Volatile memory
b. Non-volatile
c. Permanent
d. Virtual

224. An optimal page-replacement algorithm has the lowest page fault rate of all algorithms.

a. True (Page 199)
b. False

225. In_____, the library files are linked at load time.
a. **Static linking**
b. Dynamic linking

226. In swapping technique of Memory Management, the total amount transfer is directly proportional to the _____
a. amount of the memory swapped
b. amount of space on backing store
c. space on main memory
d. all the given options are correct

227. We want a page replacement algorithm with the _____ page-fault rate.
a. Lowest (Page 198)
b. Highest

228. In a UNIX system,_____system call can be used to request the operating system to memory map an opened file.
a. mmap() (Page 195)

229. The main memory is usually divided into two partitions, one for _____and other for_____.
a. resident operating System, User processes (Page 158)

230. A section of code or collection of operations in which only one process may be executing at a given time, is called critical section. Consider a system containing n processes {P0, P1, 2, ..., Pn }. Each process has a segment of code called a____
a. N-Process Critical Section Problem

231. Semaphore S is a/an_____type of variable to use as synchronization tool.
a.Integer (Page 111)

232. In order to remove the problem like busy waiting, some high level synchronization constructs are defined. What are they?

a. Critical regions and Monitors (Page 124)

233. In instruction TestAndSet mutual exclusion implementation is done by declaring a Boolean variable lock_____.

a. Initialized as false (Page 109)

234. We can use semaphores to deal with the number of _____process critical section problem.

a. n-process critical section problem

235. Linux is a version of_____operating system.

a. OS/2
b. Windows
c. **Unix**
d. None of the above

236. _____ scheduling algorithm is sometimes called shortest remaining time first scheduling algorithm.

a. Non-preemptive SJF
b. Priority Scheduling
c. Preemptive Shortest Job First (Page 85)
d. FCFS

237. Preemptive ----------scheduling is sometimes called shortest remaining-time-first scheduling.

a. First-Come-First-Served (FCFS)
b. Round-Robin
c. Sorted Job First (SJF) (Page 85)
d. Priority

238. OS helps manages the following except

a. Application software
b. Bus speed of the system
c. Memory
d. Virtual memory

239. /usr/X11R6 is used by the X Window System.

a. True (Page 27)
b. False

240. /opt is used for storage of large applications.
a. **True (Page 27)**
b. False

241. The Home Directory for superuser in Linux and Unix is
a. /home
b. /root (Page 27)
c. None of the given

242. Linux Treats Devices as Files.
a. **True (Page 26)**
b. False

243. An absolute pathname starts with the root directory (/) and a relative pathname starts with your home directory.
a. True (Page 25)
b. False

244. We can install and run multiple OS by using VMWare.
a. **True**
b. False

245. Mach, MacOS X Server, QNX, OS/2 and Windows NT are examples of OS Based on_____.
a. Layered
b. Micro Kernal (Page 22)
c. Virtual Machine
d. None of The Given

246. In Layered Approach of OS, the Layer highest Layer is User Interface layer.
a. True (Page 21)
b. False

247. Operating System is the Manager of Hardware Resources.
a. **True (Page 6)**
b. False

248. An operating system is a control program that manages the execution of user programs to prevent errors and improper use of a computer.
a. True (Page 6)
b. ►False

249. The bottom-up view is that operating system is a resource manager who manages the hardware and software resources in the computer system.
a. **True (Page 6)**
b. False

250. _____ determines What will be done.
a. Mechanism
b. Policy (Page 24)
c. Mechanism and Policy
d. None of the given

251. copy file1 file2 is an example of_____ OS view.
a. **Top down (Page 6)**
b. Bottum Up

252. The Top-down view is that it is a program that acts as an intermediary between a user of a computer and the computer hardware, and makes the computer system convenient to use.
a. True (Page 6)
b. False

253. The Purpose of Operating System is to generate Executable Programs and to_____them.
a. Regenetrate
b. Execute (Page 5)
c. Store
d. Remove

254. Users are the People, machines or a computer that uses the Hardware resources.
a. True (Page 4)
b. False

255. Database, Complier, Video games are examples of_____.
a. Hardware
b. Application (Page 4)
c. Operating System
d. Users

256. Hardware provide basic computing resource.
a. **True (Page 4)**
b. False

257. The priorities of processes in the_____group remain fixed.
a. **Kernel (Page 93)**
b. User

258. The process of switching from one process to another is called latency.
a. True
b. False (Page 34)

259. In Unix/ Linux, by default the standard input file is attached to the _____
a. Mouse
b. Keyboard (Page 55)
c. Light pen
d. Joystick

260. The nice value helps in assigning _____to a process.
a. Priority (Page 94)
b. Weight
c. Time
d. Scheduling

261. You can use the rm file1 command to_____file1
a. Retrieve
b. Remove (Page 30)
c. Make
d. modify

262. The correct command for compiling C program named program.c in Linux environment is
a. gcc program.c –o FirstPrgram (Page 31)

b. gcc –o FirstProgram program.c
c. gcc –z FirstProgram program.c
d. gcc program.c –m FirstPrgram

263. Using _____system, we can create a new process in Linux.
a. **Fork (Page 39)**
b. Exec
c. Wait
d. Exit

264. Cooperating processes never share any data, code, memory or state.
a. True
b. False (Page 5)

265. _____command display the status of a process.
a. ls
b. ps (Page 66)
c. gcc
d. Cat

266. Swapper is also termed as Short term scheduler.
a. True
b. False (Page 36)

267. _____system call is used to write to a file or FIFO or any other IPC channel.
a. read
b. write (Page 48)
c. open
d. Fork

268. A Process 'A' that has finished working but its parent process has also finished its execution. In this state the process 'A' will be called as _____ process.
a. Child
b. Thread
c. Zombie (Page 42)
d. Fork

269. _____scheduling allows a process to move between queues.

a. Round Robin
b. First Come First Serve
c. Multilevel Feedback Queue (Page 92)
d. Shortest Remaining Time First

270. Round Robin algorithm is most suitable for_____.

a. Time sharing system (Page 88)
b. Real time systems and batch systems
c. Running Batch programs
d. Expert system

271. Kernel is responsible for scheduling the user level threads.

a. True
b. False (Page 73)

272. A system call_____

a. Is an entry point into the kernel code (Page 18)
b. Allows a program to request a kernel service
c. Is a technique to protect I/O devices and other system resources
d. All of the these

273. Operating System provides services such as Managing Primary and Secondary Storage, Processes and Allowing user to manage his/her files and directories.

a. True (Page 5)
b. False

274. _____ is used in real time operating systems.

a. **Non-preemptive scheduling**
b. Preemptive scheduling
c. Dispatching scheduling
d. FCFS scheduling

275. Deadlock detection and recovery technique is exactly similar to deadlock avoidance technique to handle deadlock in the system.

a. True
b. False

276. In Overlay technique, we can overload any part of the program with the part of the program required needed recently.

a. True

b. **False**

277. _____ is the process of mapping a name to an address.

a. Addressing
b. Binding
c. Routing
d. Memory

278. __scheme works well if members of the team are to work on these shared files sequentially.

a. Common Group

b. Duplicating Files PG # 288

c. Common Login

d. Link

279. UNIX recognizes_____ modes of access

a. One

b. Two

c. Three PG # 230

d. Four

280. The_____algorithm selects the request with the minimum seek time from the current head position

a. Scan

b.SSTF PG # 244

c. Look

d.C-Look

281. Which part of the computer system helps in managing the file and memory management system?

a.Operating System

b.Device Drivers

c. Application Software

d. Hardware

282. _____is used to store data on secondary storage device.

a. Block Special File

b. Link File

c. Ordinary File PG # 218

d. Directory

283. _____is a way to establish a connection between the file to be shared and the directory entries of the userswho want to have access to this file.

a. Link PG # 229

b. Directory

c. Common Group

d. Access Permission

284. Which one of the following indicates end of the file in a read ( ) system call?

a. -1

b. **0**

c. 1

d. 2

285. In one of the deadlock prevention methods, impose a total ordering of all resource types, and require that each process requests resources in an increasing order of enumeration. This violates the
__conditionof deadlock.

a. Mutual exclusion

b. Hold and Wait

c. Circular Wait PG # 134

d. No Preemption Right

286. The bottom layer in the layered approach of Operating System is___.

a. User interface

b.Hardware PG # 18

c. Kernel

d.API

287. The non-critical section code in any critical section problem is termed as

a. Critical Section

b.Entry Section

c. Leave/Exit Section

d.Remainder Section

288. The process that satisfies all three requirements of critical section problem is called __.

a. Algorithm 1

b.Algorithm 2

c. Algorithm 3

d.Algorithm N

289. The main disadvantage of semaphore is_____.

a. Context switching

b.Busy waiting PG # 111

c. Synchronization

d.Deadlock

290. In Unix/Linux, pipes provide a method of one-way communication and for this reason it may be called

a. Soft pipes

b. FIFO named pipes

c. Full-duplex pipes

d.Half-duplex pipes PG # 46

291. Consider process A is trying to access a page that does not belong to its address space. Which of the followingprotection scheme provide protection against such actions under paging?

a.Valid/invalid (v) bit PG # 170

b.Null bit/parity (n) bit

c. Execute/parity (e) bit

d.Write/null (w) bit

292. --------- is the separation of user logical memory from physical memory.

- **Virtual Memory PG # 186**
- RAM
- Physical memory
- ROM

293. For page replacement algorithms, the page fault rate may increase as the number of allocated frames____.

a. Keep Constant

b. Increases PG # 200

c. Decreases

d. Available

294. In the Scan algorithm, disk____starts at one end of the disk, and moves toward the other end, servicingrequests as it reaches each cylinder, until it gets to the other end of the disk.

a.Arm PG # 245

b.Cylinder

c. Head

d.Vector

295. In case of thrashing, if CPU utilization is too low, the operating system_____the degree ofmultiprogramming

a.Increases PG # 208

b.Decreases

c. Increases or Decreases

d.Keeps constant

296. When there is no external fragmentation, free memory blocks are scattered on hard disk then____is usedin order to utilize these blocks for space management.

a. Indexed Allocation

b.Contiguous Allocation

c. Linked Allocation PG # 235

d.Variable Allocation

297. In a Multilevel Queue, the foreground queue has -------- scheduling algorithm and background queue has --------
------ scheduling algorithm.

a. First Come First Serve, Round-Robin

b.Round-Robin, First Come First Serve

c. Round Robin, Round Robin

d.First Come First Serve, First Come First Serve

298. Main memory is a large array of -- called memory locations ranging in size from hundreds of thousands
to billions.

a. Interrupts

b.Registers

c. Digits

d.Words PG # 12

299. The syntax for input redirection is

a.command < input-file PG # 55

b.command > input-file

c. command >= input-file

d.command =< input-file

300. The semaphore empty is initialized to the value--------- ; the semaphore full is initialized to the value.

a. 0,n

o **n,0 PG # 116**

b.n,n

o 0,0

301. High-level synchronization construct that allows the safe sharing of an abstract data type among concurrentprocesses is called a ----------

a. Read/Write Lock

b. Swap

c. Semaphore

d. Monitor

302. When drawing the resource allocation graph, processes are represented by _____and resources by _____

a. Squares, Squares

b. Circles, Circles

c. Circles, squares

d.Squares, Circles

303. Preventing the condition of_____to happen, deadlocks can be prevented to happen.

a. Critical region

b.Monitors

c. Circular wait PG # 135

d.Critical section

304. If validation bit is 0, it indicates a/an --state of segment.

a. Protected

b.Shared

c. Legal

d.Illegal PG # 178

305. Intel is basically designed for following Operating Systems except_.

a. MULTICS PG # 180

b. OS/2

c. Windows

d. Linux

306. The term **pager** is used in connection with_____.

a. Demand Paging PG # 187

b. Paging

c. Segmentation

d. Paged Segmentation

307. In deadlock detection and recovery algorithm, a deadlock exists in the

system if and only if the wait for graphcontains a _

a.Cycle PG # 145

b.Graph

c. Edge

d.Node

308. Object files and libraries are combined by a ---- program to produce the executable binary

a. Compiler

b.Linker

c. Text editor

d.Loader

309. --------- holds the smallest legal physical memory address for a process

- Stack pointers register
- **Base register PG # 10**
- Limit register
- Index register

310. External Fragmentation takes place in _____

- **Multiprogramming with Variable Tasks (MVT) PG # 163**
- Multiprogramming with Fixed Tasks (MFT)
- Multi-tasking
- Paging

311. A process is_____if it is spending more time on paging

- **Thrashing PG # 206**
- Demand paging
- Paging
- Fixed Allocation

312. Every generated by the CPU is divided into two parts: a page number (p) and a page offset (d).

- Page
- Process address space
- Physical address
- **Logical address PG # 164**

313. The most important property of the working set is its_.

o Delay

o Thrashing

o Time

o **Size** **PG # 211**

313.___algorithm is the optimal scheduling algorithm among all the non-preemptive schedulingalgorithms.

- **Shortest Job First scheduling**
- First Come First Serve
- Priority Scheduling
- Round Robin Scheduling

315. The Swap instruction which is the hardware solution to synchronization problem does not satisfy the _ condition, hence not considered to be a good solution.

a.Bounded waiting

b.Mutual exclusion

c. No preemption

d.Progress

316. The statement "A process may hold allocated resources while waiting for of other resources" best describeswhich one of the following conditions?

a. Mutual Exclusion

b.No preemption

c. Hold and wait

d.Circular wait

317. A state is___if the system can allocate resources for each process in some order and still avoid adeadlock.

. None

. Unsafe

. Starvation

. **Safe** **pg#134**

318. _algorithm is used in Deadlock avoidance.

. Bakery
. Mutual exclusion
. Banker's Google
. Safe sequence

319. Typically monitor, a high level synchronization tool is characterized by____and___.
. Single, wait
. Global variable, local variable
. Local data, programmer defined operator pg#122
. Local variables, semaphores

320. The integer value of_semaphores can not be greater than 1.
. Bounded buffer
. Binary pg#114
. Counting
. Mutex

321. Banker's algorithm is used for_.
. Deadlock removal
. Deadlock avoidance Google
. Deadlock detection
. Deadlock prevention

322. Possible side effects of _____deadlocks are low device utilization and reduced systemthroughput.
. Ignoring
. Preventing Google
. Recovering
. Avoiding

323. Preventing the condition of___to happen, deadlocks can be prevented to happen.
. Critical section
. Monitors
. Critical region

. **Circular wait pg#134**

324. The process of holding at least one resource and waiting to acquire additional resources that arecurrently being held by other processes is known as_____.

. **Hold and wait pg#128**
. Circular wait
. No preemption
. Mutual exclusion

325. The_____requires that once a writer is ready, that writer performs its writeas soon as possible. In other words, if a writer is waiting to access the object, no new readers may start reading.

. third readers-writers problem
. fourth readers-writers problem
. first readers-writers problem
. **second readers-writers problem pg#116**

326. Binary semaphore whose integer value cannot be can besimpler to implement.

. <=1
. >=1
. <1
. **>1 pg#114**

327. The condition where a set of blocked processes each holding a resource and waiting to acquire aresource held by another process in the set, is termed as_____.

. **Deadlock pg#127**
. Starvation

328. Following is not the classical problem of synchronization.

. Reader writer problem
. Dining philosophers problem
. **Counting semaphore problem pg#115**
. Bounded buffer problem

329. The integer value of_____semaphores can range over an unrestricted

integer domain.

. Mutex

. **Counting pg#114**

. Bounded buffer

. Binary

330. The_____scheme is not applicable to a resource allocation system with multiple instances ofeach resource type.

. None of the given options

. **Wait for graph pg#145**

. Resource allocation graph

. Both resource-allocation and wait-for graph

331. A dashed line is used to represent a____in Resource Allocation Graph.

. Assignment edge

. **Claim edge pg#135**

. Allocation edge

. Request edge

332. _____is an integer variable accessible through wait and signal which are atomicoperations.

. Signal

. **Semaphore pg#108**

. Busy waiting

. Mutex

333. _____is an integer variable accessible through wait and signal which are atomicoperations.

. Signal

. Semaphore page 108

. Busy waiting

. Mutex

334. Removing the possibility of deadlock in dining philosopher problem does not ensure the _____problem will not occur.

. **Starvation page 120**

. Mutual Exclusion
. Critical Section
. Bounded Buffer

335. In deadlock detection and recovery algorithm, a deadlock exists in the system if and only if the waitfor graph contains a___.
. Edge
. Cycle page 144
. Graph
. Node

336. Deadlock___provides a set of methods for setting that at least one of the necessary conditionscannot hold.
. prevention page 132
. Avoidance
. Handling
. .Recovery

337. In Resource Allocation Graph, a____Pi----> Rj indicates that process Pi may request resource Rjat some time in the future
. claim edge page 135
. assignment edge
. allocation edge
. request edge

338. Deadlock can be deal with_____ways.
. 4
. 6
. 3 page 132
. 2

339. The problem of Deadlocks can be solved by_____method(s).
. Deadlock avoidance
. Allowing deadlock to occur, then detect and recover
. All of the given page 132
. Deadlock prevention

340. _is used in the detection and recovery mechanism to handle deadlocks.

. Claim Edge Graph

. Resource allocation Graph

. Wait-for Graph page 144

. Circular Graph

341. Wrong use of wait and signal operations (in context with semaphores) can cause_____problem(s).

. All of the given options are correct Page 112

. Bounded Waiting

. Mutual Exclusion

. Deadlock

342. If system is not in a safe state, there can be NO deadlocks.

. True

b.False page 134

343. How does a logical-address space is represented?

- Through Critical section
- Through segments

344. **The main memory is usually divided into partitions, one for _____ and other for_____**

- Operating System, User processes
- Operating system, CPU
- Processes, Virtual Memory
- Base Register, Limit Register

350. A program cannot execute unless whole or necessary part of it resides in the main memory.

- **TRUE**
- **FALSE**

351. The_____protection scheme guards against a process trying to access a page that does not belong to its address space.

- **Primary**
- **Hybrid**
- **Secondary**
- **Tertiary**

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352. The system maintains a_____ of all processes whose memory images are on the backing store or in memory and are ready to run.

- **Que**
- **Ready que**
- **List**
- **Environment**

353.If there exists a logical address space of 16 pages of 1024 words, each mapped into a physical memory of_____frames.

- **64**
- **32**
- **16**
- **48**

354.The size of pages and frames are same in logical memory and physical memory respectively.

- **TRUE**
- **FALSE**

355.Address Binding will be_____in Multiprogramming with Variable Tasks (MVT)

- **Run Time**
- **Load Time**
- **Dynamic Time**
- **None of Given Right answer FIX**

356. Every---------- generated by the CPU is divided into two parts: a page number (p) and a page offset (d).

- **Page**
- **Logical Error**
- **Physical Error**
- **Process Address Space**

355---------- points to the page table.

- **Translation look-aside buffers**
- **Page offset**
- **Page-table length register (PRLR)**
- **Page-table base register (PTBR**

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356.To eliminate external fragmentation in segmentation the scheme used is _____.

Fixed size partition scheme
Variable size partition scheme
Fixed size paging scheme
Variable size paging scheme