1. Physical memory is broken into fixed-sized blocks called \_\_\_\_\_\_\_\_  
a) frames  
b) pages  
c) backing store  
d) none of the mentioned

Answer: a  
Explanation: None.

2. Logical memory is broken into blocks of the same size called \_\_\_\_\_\_\_\_\_  
a) frames  
b) pages  
c) backing store  
d) none of the mentioned

Answer: b  
Explanation: None.

3. Every address generated by the CPU is divided into two parts. They are \_\_\_\_\_\_\_\_\_\_\_\_  
a) frame bit & page number  
b) page number & page offset  
c) page offset & frame bit  
d) frame offset & page offset

Answer: b  
Explanation: None.

4. The \_\_\_\_\_\_\_\_\_\_ is used as an index into the page table.  
a) frame bit  
b) page number  
c) page offset  
d) frame offset

Answer: b  
Explanation: None.

5. The \_\_\_\_\_ table contains the base address of each page in physical memory.  
a) process  
b) memory  
c) page  
d) frame

Answer: c  
Explanation: None.

6. The size of a page is typically \_\_\_\_\_\_\_\_\_\_\_\_  
a) varied  
b) power of 2  
c) power of 4  
d) none of the mentioned

Answer: b  
Explanation: None.

8. With paging there is no \_\_\_\_\_\_\_\_ fragmentation.  
a) internal  
b) external  
c) either type of  
d) none of the mentioned

Answer: b  
Explanation: None.

9. The operating system maintains a \_\_\_\_\_\_ table that keeps track of how many frames have been allocated, how many are there, and how many are available.  
a) page  
b) mapping  
c) frame  
d) memory

Answer: c  
Explanation: None.

10. Paging increases the \_\_\_\_\_\_ time.  
a) waiting  
b) execution  
c) context – switch  
d) all of the mentioned

Answer: c  
Explanation: None.

11. Smaller page tables are implemented as a set of \_\_\_\_\_\_\_  
a) queues  
b) stacks  
c) counters  
d) registers

Answer: d  
Explanation: None.

12. The page table registers should be built with \_\_\_\_\_\_\_  
a) very low speed logic  
b) very high speed logic  
c) a large memory space  
d) none of the mentioned

Answer: b  
Explanation: None.

13. For larger page tables, they are kept in main memory and a \_\_\_\_\_\_\_\_\_\_ points to the page table.  
a) page table base register  
b) page table base pointer  
c) page table register pointer  
d) page table base

Answer: a  
Explanation: None.

14. For every process there is a \_\_\_\_\_\_\_\_\_\_  
a) page table  
b) copy of page table  
c) pointer to page table  
d) all of the mentioned

Answer: a  
Explanation: None.

15. Each entry in a translation lookaside buffer (TLB) consists of \_\_\_\_\_\_\_\_\_\_\_\_  
a) key  
b) value  
c) bit value  
d) constant

Answer: a  
Explanation: None.

16. If a page number is not found in the TLB, then it is known as a \_\_\_\_\_\_\_\_\_\_\_\_  
a) TLB miss  
b) Buffer miss  
c) TLB hit  
d) All of the mentioned

Answer: a  
Explanation: None.

17. An \_\_\_\_\_\_ uniquely identifies processes and is used to provide address space protection for that process.  
a) address space locator  
b) address space identifier  
c) address process identifier  
d) none of the mentioned

Answer: b  
Explanation: None.

18. The percentage of times a page number is found in the TLB is known as \_\_\_\_\_\_\_\_\_\_\_\_  
a) miss ratio  
b) hit ratio  
c) miss percent  
d) none of the mentioned

Answer: b  
Explanation: None.

19. Memory protection in a paged environment is accomplished by \_\_\_\_\_\_\_\_\_\_\_\_  
a) protection algorithm with each page  
b) restricted access rights to users  
c) restriction on page visibility  
d) protection bit with each page

Answer: d  
Explanation: None.

20. When the valid – invalid bit is set to valid, it means that the associated page \_\_\_\_\_\_\_\_\_\_\_\_  
a) is in the TLB  
b) has data in it  
c) is in the process’s logical address space  
d) is the system’s physical address space

Answer: c  
Explanation: None.

21. Illegal addresses are trapped using the \_\_\_\_\_ bit.  
a) error  
b) protection  
c) valid – invalid  
d) access

Answer: c  
Explanation: None.

22. To obtain better memory utilization, dynamic loading is used. With dynamic loading, a routine is not loaded until it is called. For implementing dynamic loading \_\_\_\_\_\_\_\_\_\_\_\_  
a) special support from hardware is required  
b) special support from operating system is essential  
c) special support from both hardware and operating system is essential  
d) user programs can implement dynamic loading without any special support from hardware or operating system

Answer: d  
Explanation: None.

23. In paged memory systems, if the page size is increased, then the internal fragmentation generally \_\_\_\_\_\_\_\_\_\_\_\_  
a) becomes less  
b) becomes more  
c) remains constant  
d) none of the mentioned

Answer: b  
Explanation: None.