1. In real time operating system \_\_\_\_\_\_\_\_\_\_\_\_  
a) all processes have the same priority  
b) a task must be serviced by its deadline period  
c) process scheduling can be done only once  
d) kernel is not required  
View Answer

Answer: b  
Explanation: None.

2. Hard real time operating system has \_\_\_\_\_\_\_\_\_\_\_\_\_\_ jitter than a soft real time operating system.  
a) less  
b) more  
c) equal  
d) none of the mentioned  
View Answer

Answer: a  
Explanation: Jitter is the undesired deviation from the true periodicity.

3. For real time operating systems, interrupt latency should be \_\_\_\_\_\_\_\_\_\_\_\_  
a) minimal  
b) maximum  
c) zero  
d) dependent on the scheduling  
View Answer

Answer: a  
Explanation: Interrupt latency is the time duration between the generation of interrupt and execution of its service.

4. In rate monotonic scheduling \_\_\_\_\_\_\_\_\_\_\_\_  
a) shorter duration job has higher priority  
b) longer duration job has higher priority  
c) priority does not depend on the duration of the job  
d) none of the mentioned  
View Answer

Answer: a  
Explanation: None.

5. In which scheduling certain amount of CPU time is allocated to each process?  
a) earliest deadline first scheduling  
b) proportional share scheduling  
c) equal share scheduling  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

6. The problem of priority inversion can be solved by \_\_\_\_\_\_\_\_\_\_\_\_  
a) priority inheritance protocol  
b) priority inversion protocol  
c) both priority inheritance and inversion protocol  
d) none of the mentioned  
View Answer

Answer: a  
Explanation: None.

7. Time duration required for scheduling dispatcher to stop one process and start another is known as \_\_\_\_\_\_\_\_\_\_\_\_  
a) process latency  
b) dispatch latency  
c) execution latency  
d) interrupt latency  
View Answer

Answer: b  
Explanation: None.

8. Time required to synchronous switch from the context of one thread to the context of another thread is called?  
a) threads fly-back time  
b) jitter  
c) context switch time  
d) none of the mentioned  
View Answer

Answer: c  
Explanation: None.

9. Which one of the following is a real time operating system?  
a) RTLinux  
b) VxWorks  
c) Windows CE  
d) All of the mentioned  
View Answer

Answer: d  
Explanation: None.

10. VxWorks is centered around \_\_\_\_\_\_\_\_\_\_\_\_  
a) wind microkernel  
b) linux kernel  
c) unix kernel  
d) none of the mentioned  
View Answer

Answer: a  
Explanation: None.

11. What is the disadvantage of real addressing mode?  
a) there is a lot of cost involved  
b) time consumption overhead  
c) absence of memory protection between processes  
d) restricted access to memory locations by processes  
View Answer

Answer: c  
Explanation: None.

12. Preemptive, priority based scheduling guarantees \_\_\_\_\_\_\_\_\_\_\_\_  
a) hard real time functionality  
b) soft real time functionality  
c) protection of memory  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

13. Real time systems must have \_\_\_\_\_\_\_\_\_\_\_\_  
a) preemptive kernels  
b) non preemptive kernels  
c) preemptive kernels or non preemptive kernels  
d) neither preemptive nor non preemptive kernels  
View Answer

Answer: a  
Explanation: None.

14. What is Event latency?  
a) the amount of time an event takes to occur from when the system started  
b) the amount of time from the event occurrence till the system stops  
c) the amount of time from event occurrence till the event crashes  
d) the amount of time that elapses from when an event occurs to when it is serviced.  
View Answer

Answer: d  
Explanation: None.

15. Interrupt latency refers to the period of time \_\_\_\_\_\_\_\_\_\_\_\_  
a) from the occurrence of an event to the arrival of an interrupt  
b) from the occurrence of an event to the servicing of an interrupt  
c) from arrival of an interrupt to the start of the interrupt service routine  
d) none of the mentioned  
View Answer

Answer: c  
Explanation: None.

16. Real time systems need to \_\_\_\_\_\_\_\_\_\_ the interrupt latency.  
a) minimize  
b) maximize  
c) not bother about  
d) none of the mentioned  
View Answer

Answer: a  
Explanation: None.

17. The amount of time required for the scheduling dispatcher to stop one process and start another is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_  
a) event latency  
b) interrupt latency  
c) dispatch latency  
d) context switch  
View Answer

Answer: c  
Explanation: None.

18. The most effective technique to keep dispatch latency low is to \_\_\_\_\_\_\_\_\_\_\_\_  
a) provide non preemptive kernels  
b) provide preemptive kernels  
c) make it user programmed  
d) run less number of processes at a time  
View Answer

Answer: b  
Explanation: None.

19. Priority inversion is solved by use of \_\_\_\_\_\_\_\_\_\_\_\_\_  
a) priority inheritance protocol  
b) two phase lock protocol  
c) time protocol  
d) all of the mentioned  
View Answer

Answer: a  
Explanation: None.

20. Bounded capacity and Unbounded capacity queues are referred to as \_\_\_\_\_\_\_\_\_\_  
a) Programmed buffering  
b) Automatic buffering  
c) User defined buffering  
d) No buffering  
View Answer

Answer: b  
Explanation: None.

21. In a real time system the computer results \_\_\_\_\_\_\_\_\_\_\_\_  
a) must be produced within a specific deadline period  
b) may be produced at any time  
c) may be correct  
d) all of the mentioned  
View Answer

Answer: a  
Explanation: None.

22. In a safety critical system, incorrect operation \_\_\_\_\_\_\_\_\_\_\_\_  
a) does not affect much  
b) causes minor problems  
c) causes major and serious problems  
d) none of the mentioned  
View Answer

Answer: c  
Explanation: None.

23. Antilock brake systems, flight management systems, pacemakers are examples of \_\_\_\_\_\_\_\_\_\_\_\_  
a) safety critical system  
b) hard real time system  
c) soft real time system  
d) safety critical system and hard real time system  
View Answer

Answer: d  
Explanation: None.

24. In a \_\_\_\_\_\_ real time system, it is guaranteed that critical real time tasks will be completed within their deadlines.  
a) soft  
b) hard  
c) critical  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

25. Some of the properties of real time systems include \_\_\_\_\_\_\_\_\_\_\_\_  
a) single purpose  
b) inexpensively mass produced  
c) small size  
d) all of the mentioned  
View Answer

Answer: d  
Explanation: None.

26. The amount of memory in a real time system is generally \_\_\_\_\_\_\_\_\_\_\_\_  
a) less compared to PCs  
b) high compared to PCs  
c) same as in PCs  
d) they do not have any memory  
View Answer

Answer: a  
Explanation: None.

27. What is the priority of a real time task?  
a) must degrade over time  
b) must not degrade over time  
c) may degrade over time  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

28. Memory management units \_\_\_\_\_\_\_\_\_\_\_\_  
a) increase the cost of the system  
b) increase the power consumption of the system  
c) increase the time required to complete an operation  
d) all of the mentioned  
View Answer

Answer: d  
Explanation: None.

29. The technique in which the CPU generates physical addresses directly is known as \_\_\_\_\_\_\_\_\_\_\_\_  
a) relocation register method  
b) real addressing  
c) virtual addressing  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

30. The Zero Capacity queue \_\_\_\_\_\_\_\_\_\_  
a) is referred to as a message system with buffering  
b) is referred to as a message system with no buffering  
c) is referred to as a link  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

31. What is Inter process communication?  
a) allows processes to communicate and synchronize their actions when using the same address space  
b) allows processes to communicate and synchronize their actions without using the same address space  
c) allows the processes to only synchronize their actions without communication  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

32. Message passing system allows processes to \_\_\_\_\_\_\_\_\_\_  
a) communicate with one another without resorting to shared data  
b) communicate with one another by resorting to shared data  
c) share data  
d) name the recipient or sender of the message  
View Answer

Answer: a  
Explanation: None.

33. Which of the following two operations are provided by the IPC facility?  
a) write & delete message  
b) delete & receive message  
c) send & delete message  
d) receive & send message  
View Answer

Answer: d  
Explanation: None.

34. Messages sent by a process \_\_\_\_\_\_\_\_\_\_  
a) have to be of a fixed size  
b) have to be a variable size  
c) can be fixed or variable sized  
d) None of the mentioned  
View Answer

Answer: c  
Explanation: None.

35. The link between two processes P and Q to send and receive messages is called \_\_\_\_\_\_\_\_\_\_  
a) communication link  
b) message-passing link  
c) synchronization link  
d) all of the mentioned  
View Answer

Answer: a  
Explanation: None.

36. Which of the following are TRUE for direct communication?  
a) A communication link can be associated with N number of process(N = max. number of processes supported by system)  
b) A communication link can be associated with exactly two processes  
c) Exactly N/2 links exist between each pair of processes(N = max. number of processes supported by system)  
d) Exactly two link exists between each pair of processes  
View Answer

Answer: b  
Explanation: None.

37. In indirect communication between processes P and Q \_\_\_\_\_\_\_\_\_\_  
a) there is another process R to handle and pass on the messages between P and Q  
b) there is another machine between the two processes to help communication  
c) there is a mailbox to help communication between P and Q  
d) none of the mentioned  
View Answer

Answer: c  
Explanation: None.

38. In the non blocking send \_\_\_\_\_\_\_\_\_\_  
a) the sending process keeps sending until the message is received  
b) the sending process sends the message and resumes operation  
c) the sending process keeps sending until it receives a message  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

39. In the Zero capacity queue \_\_\_\_\_\_\_\_\_\_  
a) the queue can store at least one message  
b) the sender blocks until the receiver receives the message  
c) the sender keeps sending and the messages don’t wait in the queue  
d) none of the mentioned  
View Answer

Answer: b  
Explanation: None.

You can also refer

<https://youtu.be/R6vOWF1JY3Y> for SPPU EXAM 2020 ERTOS MCQB