KTest

更に上のクオリティ　更に上のサービス

問題集

http://www.ktest.jp

1年で無料進級することに提供する

Exam : **UM0-401**

Title : Omg OCRES-Intermediate Exam

Version : DEMO

1. An example of a module exhibiting temporal cohesion is a combination of _____.

A. the control and management of two onboard hardware clocks

B. a 40 millisecond periodic navigation function and a 40 millisecond periodic display update function

C. several mathematical functions such as the sine, cosine, and arctangent functions

D. the vehicle speed and acceleration management functions

Answer: B

2. What two actions must occur in systems that use overlaying with a disk drive backing store? (Choose two.)

A. Only data is stored on the disk and code is stored in RAM.

B. A task executing in RAM can also execute code that is stored on the disk.

C. The operating system must prevent each task in RAM from accessing RAM outside the area reserved for it.

D. The code for the currently executing tasks is stored in RAM and that for the currently inactive tasks is stored on the disk, as managed by the operating system.

Answer: CD

3. Which two statements about static memory allocation are true? (Choose two.)

A. Garbage collection is not required.

B. Memory fragmentation does not occur.

C. Memory allocation units are always the same fixed size.

D. Tasks must inform the run-time (e.g., operating system) the total amount of memory they will need before they begin requesting memory.

Answer: AB

4. POSIX _____.

A. is the same as UNIX

B. is not designed for real-time systems

C. does not support asynchronous I/O

D. is an operating system interface standard

Answer: D

5. A scheduler runs tasks to completion instead of pre-empting tasks by time slicing or according to priority. What two actions will occur? (Choose two.)

A. Maximize the number of completed tasks per unit of time

B. Minimize the task scheduling and context switching overheads

C. Honor the commitment made to complete the task once it has begun executing

D. Share the processor time fairly among ready tasks

Answer: BC

6. Which two statements are true of a monitor for synchronization? (Choose two.)

A. No concurrent access by tasks is allowed to any resource(s) within a monitor.

B. One monitor may encapsulate any number of resources and their synchronization functions.

C. If a requesting task enters a monitor but finds the resource isn't available, the task exits the monitor and is placed at the end of the monitor's external queue.

D. If two tasks are waiting in a monitor's queues for separate resources, when the task that has been accessing a resource finishes doing so, all the queues with waiting tasks are served round-robin.

Answer: AB

7. Which two are POSIX real-time extensions? (Choose two.)

A. suspend / resume API's

B. direct cyclic executive support

C. task synchronization

D. priority-based preemptive task scheduling

Answer: CD

8. Which two of these techniques would successfully avoid mutual exclusion deadlocks? (Choose two.)

A. Set up a circular dependency of tasks and resources

B. Allow a task's use of a resource to be pre-empted

C. Require tasks to acquire and use only one resource at a time

D. Require tasks to acquire resources in order of the tasks' priorities

Answer: BC

9. The priority of a runnable task blocked on a resource request is temporarily changed to be the same as the priority of another task. Which two phrases could describe the new priority? (Choose two.)

A. The priority of the highest priority task

B. The priority of the lowest priority task which uses the resource

C. The priority of the higher priority task being blocked by the lower priority one

D. The ceiling priority of the resource on which the lower priority task is blocked

Answer: CD

10. What two results occur by changing priorities dynamically? (Choose two.)

A. Reduces overhead

B. Increases overhead

C. May starve lower priority tasks

D. Avoids the need for priority queues

Answer: BC

11. A representative benchmark differs from a synthetic benchmark in that a _____.

A. representative benchmark models a representative ideal application

B. synthetic benchmark precisely predicts specific application performance

C. representative benchmark models a real application's execution characteristics

D. synthetic benchmark must be developed by the same team that will build the application

Answer: C

12. Network protocol models are described as layers that _____.

A. permit separation of concerns of lower layers (e.g., hardware) from higher layers (e.g., application)

B. add increasing efficiency to higher layers (e.g., application) than lower layers (e.g., hardware)

C. are highly consistent in number and function among different protocols

D. provide efficient application access to network hardware addresses

Answer: A

13. The primary requirement for an RTOS is to _____.

A. maximize application speed and minimize memory utilization

B. enable fast control and data transfer to critical system devices

C. enable the application to meet both its functional and temporal requrements

D. permit the application to efficiently access all resources (e.g., I/O and memory)

Answer: C

14. A strictly conforming POSIX application _____.

A. uses all POSIX functions and standard options

B. uses only IEEE tested conforming operating systems

C. uses only POSIX required API's for its OS functionality

D. runs on all operating systems whose vendors claim POSIX conformance

Answer: C

15. Which statement accurately describes where a "mark" exists in the MDA model hierarchy?

A. as part of the PSM

B. as part of the PIM

C. as part of a transparent layer placed over a PIM

D. as part of a transparent layer placed over a PSM

Answer: C

16. In MDA practice, transformations from PIM to PSM _____. (Choose TWO.)

A. may be automated

B. are required for all systems

C. may be hand generated

D. always produce executable code

E. are always implemented in the QVT action language

Answer: AC

17. What does the term "Platform independence" mean?

A. The application model can be moved to every other platform that is available.

B. The application model is independent of the features of any particular platform from some class of platforms.

C. The application is written in a high-level programming language such as Java or C++.

D. The application model is independent of the hardware platform where the application may be deployed.

Answer: B

18. What is an "implementation model"?

A. A PIM that provides all of the information needed to construct a system and put it into operation.

B. A model that includes C++ source code for all classes in the model.

C. A PSM that provides all of the information needed to construct a system and put it into operation.

D. A file that is executable on some computer system.

Answer: C

19. What two functions does the Model transformation specification provide? (Choose TWO.)

A. Always prescribes a one-to-one mapping from input model elements to output model elements.

B. Prescribes the transformations that merge a set of models to produce another set of models.

C. Are implemented using the OMG standard Model Transformation language.

D. Prescribes the transformation of one model to another model.

Answer: BD

20. A metamodel is a _____.

A. set of UML templates for drawing system models

B. special kind of model that specifies a modeling language

C. collection of stereotypes and classes that define a set of architectural patterns

D. conceptual pattern for a class of application systems

Answer: B