

Exam : **UM0-411**

Title : Omg OCRES - Advanced

Exam

Version: Demo

1. What is one difference between service level software and application level software?

A. Service level software always provides real-time guarantees on execution time, while application level

software does not.

B. Application level software always forms the core "building bricks" of software systems while service

level software is always portable across different hardware.

C. Application level software provides the functionality and behavior required of the system while service

level software provides application-independent functionality.

D. Service level software always provides the same set of operations regardless of environment, while

application level software provide a consistent programming interface.

Answer: C

2. What is the difference between static and dynamic variables?

A. Static variables are used to save memory space in lieu of dynamic variables.

B. Static variables have global visibility while dynamic variables are restricted to individual components.

C. Static variables have a set value for the lifetime of the program, while dynamic variables can change

value as determined by the program.

D. Static variables exist for as long as the program runs, while dynamic variables are created and

destroyed by the program and scoping rules.

Answer: D

3. A Rate Monotonic Schedule sets task priorities according to what?

A. task laxity

B. task deadline

C. system mode

D. length of a task's period

Answer: D

4. Programs devised using functional structuring are based on what?

A. abstract machines organized in layers

B. data processed by individual statements

C. functions operating on shared structures

| D. independent functions organized in parallel Answer:A |
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| 5. Which is an example of a performance modeling tool? |
| A. spreadsheet |
| B. discrete event simulator |
| C. transaction rate analyzer |
| D. software configuration manager Answer: B |
| 6. Which statement is true about the feasibility of a Rate Monotonic Schedule? |
| A. It CANNOT be determined precisely. |
| B. It can be determined only for the highest priority task. |
| C. It can be determined for any set of task deadlines with bounded execution times. |
| D. It can be determined for any number of periodic tasks with bounded execution times. Answer: D |
| 7. What does performance engineering start with? |
| A. creating a predictable system architecture |
| B. choosing an appropriately predictable scheduling policy |
| C. defining the performance requirements for the target system |
| D. defining a set of performance tests to determine that requirements will be met Answer: C |
| 8. How does a pure tree decomposition differ from a general hierarchical decomposition? |
| A. Different modules share standard subroutines. |
| B. Leaf-functions are shared between many different modules. |
| C. 'Building-brick' functions are NOT shared between modules. |
| D. System branch prediction can be used to increase performance. Answer: C |

9. Creating rate groups can produce which effect? A. reducing processor load variations B. ensuring that time constraints are met C. decreasing the overhead of task dispatch D. simplifying system maintainability when requirements change Answer: C 10. Earliest deadline scheduling is a form of what? A. preemptive static scheduling B. deadline monotonic scheduling C. non-preemptive static scheduling D. priority-based preemptive dynamic scheduling Answer: D 11. For which schedule is the task priority computed using both the tasks execution time and its deadline? A. Least Laxity First B. Shortest Job First C. Deadline Monotonic D. Shortest Remaining Time Answer:A 12. A 'strongly typed' programming language is subject to which two rules? (Choose two.) A. Every data object must belong to one unique type. B. All data objects are strongly associated to a local scope. C. Data object names must be in strong Hungarian notation. D. Data objects must be of the same type during assignments unless actively overridden. Answer:AD

13. Which two most accurately describe the added value of using MDA based transformations? (Choose

two.)

| A. PIM/PSM distinction |
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| B. PIM/PSM template usage |
| C. Transformation recording |
| D. Transformation verification |
| E. Transformation automation Answer:AC |
| 14. What transformation method is a component-based product line architecture most likely to use? |
| A. QVT |
| B. Manual |
| C. Patterns |
| D. Factoring |
| E. Automatic Answer: E |
| 15. Which statement is true about a PIM? |
| A. It is always an application-level model. |
| B. It is sometimes called a domain model. |
| C. It may be transformed to a PSM using cascaded transformations. |
| D. It is a set of subsystems that provides functionality through interfaces. Answer: C |
| 16. Which statement is true about an interoperability transformation? |
| A. It is a transformation applied to interoperability connectors. |
| B. It includes transformation specifications for two different platforms. |
| C. It is a transformation that distributes a PSM to a multiprocessor system. |
| D. It transforms two PIMs to a PSM that is interoperable on a single platform. Answer: B |
| 17. Which statement is NOT true about a PSM? |

- A. It may abstract away some of the platform details
- B. It always includes a detailed model of the platform.
- C. It must always be able to produce an implementation.
- D. It must always include all details necessary to produce an implementation.

Answer: B

- 18. What must include all of the information needed to construct a system and to put it into operation?
- A. Platform
- B. Viewpoint
- C. Implementation
- D. Platform Specific Model

Answer: C

- 19. Which two statements correctly describe the MDA Pattern? (Choose two.)
- A. It includes a PIM that is independent of all platforms.
- B. A PIM on one context may be a PSM in another context.
- C. It includes a PIM that is independent of a specific class of platforms.
- D. Once transformed into a PSM, a model will always be viewed as a PSM.

20. What are two characteristics of manual transformation in the MDA? (Choose two.)

Answer: BC

- A. It requires a record of the manual transformation.
- B. It is a radical departure from traditional software design methods.
- C. It makes an explicit distinction between a platform independent model and the transformed platform specific model.
- D. It adds very little to standard software design practices in use today, but provides a method to incorporate legacy software under the MDA name.

Answer:AC