EC 511 – Fall 2003
George Mason University

Assignment 8

Student Name: __________________________________________________

Mark your answer below and return **only** this answer sheet:

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1. Existing systems based on older technologies are called __________.
   a) databases
   b) electronic business systems
   c) legacy systems
   d) middleware
   e) transaction systems

2. __________ is a class of technologies that are directed toward integrating systems based on different platforms into one cohesive system.
   a) Middleware
   b) Groupware
   c) CRM
   d) Legacy systems
   e) Transformation

3. Reasons organizations keep legacy systems in place include
   a) their mistrust of new technologies.
   b) the fact that they are well-documented.
   c) their simple structure.
   d) the fact that the infrastructure is already in place to support it.
   e) the transaction volume is not high enough to justify a change in technology.

4. A logical unit of work that is composed of a set of operations that occur together in a business environment that has a goal of all parts being processed successfully or no parts being processed is called a(n) _______.
   a) workstation program
   b) server program
   c) transaction
   d) middleware
   e) integrated program

5. Properties of a “well-behaved” transaction include
   a) heterogeneity
   b) symmetry
   c) atomicity
   d) automaticity
   e) homogeneity

6. The __________ property of a transaction means that the database is in a stable state before and after the successful transaction.
   a) atomicity
   b) automaticity
   c) consistency
   d) durable
   e) none of the above
7. The _________ property of a transaction means that changes made to the database exist past the end of the transaction.
   a) isolation
   b) automaticity
   c) consistency
   d) durable
   e) none of the above

8. Approaches to making heterogeneous systems work together include
   a) following the same set of standards.
   b) using middleware to “translate” between the systems.
   c) using network communication software.
   d) A and B
   e) B and C

9. Three categories of middleware include
   a) workstation, network, and server.
   b) application, network, and server.
   c) communication, data management, and platform.
   d) object, data, and program.
   e) none of the above.

10. An example of the _________ category of middleware is the use of remote procedure calls.
    a) communication
    b) server
    c) network
    d) client
    e) object

11. RPC and MOM are two general types of _____________ middleware.
    a) communication
    b) data management
    c) platform
    d) object
    e) network

12. With ____________, applications send messages that are stored until the server is ready to act upon them.
    a) RPC
    b) MOM
    c) ORB
    d) TP
    e) SQL-oriented
13. Message queuing and message passing are two types of _________.
   a) ORB
   b) RPC
   c) TP
   d) MOM
   e) ACM

14. ______________ type of MOM allows applications to send messages to a virtual waiting room where the messages sit until the receiving application is ready to receive them.
   a) RPC
   b) message queuing
   c) message passing
   d) server-based
   e) client-based

15. ____________ type of MOM pushes information to applications, rather than waiting for applications to request it.
   a) RPC
   b) message queuing
   c) message passing
   d) server-based
   e) client-based

16. ___________ middleware allows an application to access data that is not defined inside that application.
   a) data management
   b) platform
   c) data communication
   d) MOM
   e) RPC

17. Transaction-oriented middleware and object request brokers are types of __________ middleware.
   a) object-oriented
   b) transaction
   c) communication
   d) data management
   e) platform
18. A(n) _____________ monitor provides environments for the transaction-oriented applications that must access relational databases.
   a) database
   b) SQL
   c) data integration
   d) transaction processing
   e) business logic

19. ____________ allow applications to request services and send objects in an object-oriented environment.
   a) ORBs
   b) RPCs
   c) TPs
   d) MOMs
   e) ACMs

20. SQL-oriented middleware is an example of __________middleware.
   a) communication
   b) data management
   c) platform
   d) ORB
   e) RPC

21. The most common type of ORB used today is
   a) synchronous
   b) asynchronous
   c) symmetric
   d) asymmetric
   e) COM

22. _________ is likely the most important aspect of legacy systems integration.
   a) Business logic transformation
   b) Communication
   c) Data integration
   d) Platform integration
   e) Managing transactions

23. The approach to legacy systems integration that requires a complex process of reanalysis and redesign of legacy databases is said to be _________.
   a) a data approach
   b) object-oriented
   c) invasive
   d) non-invasive
   e) the data modeling approach