**D.K. COLLEGE, DUMRAON**

**DEPT. OF BCA**

**Assignment for Internal Assessment & Team Work**

**BCA 5TH SEMESTER COM/DCOM Programming [5BCA1]**

**Fill in the blanks:**

1. \_\_\_\_\_\_\_\_\_\_ refers to the ability of an application s/w to balance the load amongst different servers running components on them.
2. Microsoft COM technology is the Microsoft windows family of operating system which enables \_\_\_\_\_\_\_\_\_\_ to communicate.
3. Server COM component that exposes its functionality to \_\_\_\_\_\_\_\_\_\_ so that they can use it.
4. \_\_\_\_\_\_\_\_\_\_ is the Microsoft protocol that enables software component to communicate directly over a n/w in a reliable way.
5. DCOM is also called \_\_\_\_\_\_\_\_\_\_
6. \_\_\_\_\_\_\_\_\_\_ which allowed sending and receiving messages in so-called “Conversation” between application.
7. OLE which dynamically linked one s/w to another i.e the leading technologies introduced with \_\_\_\_\_\_\_\_\_\_
8. The full form of DDE is \_\_\_\_\_\_\_\_\_\_
9. The foundation of OLE is \_\_\_\_\_\_\_\_\_\_
10. Group of work station in the n/w is called \_\_\_\_\_\_\_\_\_\_
11. \_\_\_\_\_\_\_\_\_\_ refers to the ability of an application to cope with the ever increasing load in terms of no. of user that application and also data moving across the network.
12. \_\_\_\_\_\_\_\_\_\_ Component uses the services and functionality provided by other COM component.
13. Server COM Component that exposes its functionality to \_\_\_\_\_\_\_\_\_\_ so that they can use it.
14. In process server is implement as \_\_\_\_\_\_\_\_\_\_
15. \_\_\_\_\_\_\_\_\_\_ server component means it runs in another process on the same machine or in another process on a remote machine.
16. \_\_\_\_\_\_\_\_\_\_ are atomic operation in which no one part of the operation can succeed unless all parts of the operation succeed.
17. Transaction have several integral face known as \_\_\_\_\_\_\_\_\_\_ properties.
18. All applications are having three element within them which are user interface, \_\_\_\_\_\_\_\_\_\_, data storage element.
19. Inprocess server is implemented as \_\_\_\_\_\_\_\_\_\_
20. Outprocess server is implemented as \_\_\_\_\_\_\_\_\_\_

**Multiple Choice Questions**

1. In 1993, Microsoft released the \_\_\_\_\_\_\_\_\_\_ which encode more than just compound document.

a) OLE1 b) OLE2 c) OLE3 d) OLE4

1. OLE 1.0 was basically a method of handling \_\_\_\_\_\_\_\_\_\_.

a) Compound Document b) Static Document c) Objects d) Texts

1. \_\_\_\_\_\_\_\_\_\_ uses the services and functionality provided by other component.

a) Server Component b) Client Component c) DCOM d) OLE1

1. COM was first time introduced with Windows \_\_\_\_\_\_\_\_\_\_.

a) NT b) 95 c) 3.0 d) XP

1. Microsoft’s protocol that enables s/w component directory over the N/W in a reliable environment is called

a) S/W OLE b) N/W OLE Extend c) OLE d) COM+

1. \_\_\_\_\_\_\_\_\_\_ is the loose communication channel between two component.

a) Linking b) Embedding c) Messaging d) Queuing

1. \_\_\_\_\_\_\_\_\_\_ component can exist in same process, in the different process on the same computer.

a) Queue b) Embed c) Message d) S/W

1. \_\_\_\_\_\_\_\_\_\_ stores a message unit until an appropriate application sees fit to retrieve the message.

a) Sending system b) Queue c) DCOM d) Receiving System

1. In \_\_\_\_\_\_\_\_\_\_ architecture, everything is in a single executable file.

a) Monolithic b) Client-Server c) n-tier d) two-tier

1. \_\_\_\_\_\_\_\_\_\_ are atomic operation in which one part of the operation can’t succeed unless all part of the operation succeed.

a) Queuing b) Transactions c) Process Management d) Messaging

1. In \_\_\_\_\_\_\_\_\_\_, the business rule is applied by the client side.

a) Thin Client b) Thick Client c) Client-Server d) Queuing

1. In \_\_\_\_\_\_\_\_\_\_, the business rule is applied by the server side.

 a) Thin Client b) Thick Client c) Server-Client d) Queuing

1. In \_\_\_\_\_\_\_\_\_\_ relationship, processing can be shared by both machines.

 a) Client-server b) Monolithic c) n-tier d) DCOM

1. The most common architecture in Desktop Application is \_\_\_\_\_\_\_\_\_\_.

 a) Single-tier b) Two-tier c) n-tier d) None

1. \_\_\_\_\_\_\_\_ is a critical feature for those applications that must support on expanding enterprise.

 a) Distribution b) Scalability c) Security d) None

1. Which of the following is/are the benefits of COM:

 a) Sharing b) Scalability c) Versioning d) All of these

1. In three-tier architecture, business rule are generally applied on \_\_\_\_\_\_\_\_\_\_\_

 a) First-tier b) Middle-tier c) Last-tier d) None

1. To create a distributed application that avoid the problems of N/W bottle-necks, we should consider \_\_\_\_\_\_\_\_\_\_ architecture.

 a) Single-tier b) Two-tier c) n-tier d) Monolithic

1. \_\_\_\_\_\_\_\_\_\_ is executed in different address space from that of the client.

 a) Inprocess Server b) Outprocess Server c) Monolithic Architecture d) None

1. \_\_\_\_\_\_\_\_\_ takes care of storing and retrieve data for Multiple-user.

 a) Client-sever b) Database server c) Multi-user architecture d) None

**Short Questions**

1. What is Multi-tier Architecture?
2. Explain security in COM programming with example.
3. Discuss scalability in COM.
4. How security is performed in COM?
5. How is Multi-tier Architecture different from Three-tier architecture?
6. How is DNA associated with DCOM?
7. What do you mean by Persistence Object?
8. How clustering factor improve and help in COM programming?
9. What is transaction processing?
10. Define COM and explain briefly the features and emergence of COM.

**Descriptive Questions**

1. What were the challenges faced by the software industry prior to release of Component Object Model? Describe briefly the evolution of component S/W.
2. Explain with an example the communication of COM components in an environment.
3. COM/DCOM is not a programming language. Explain.
4. How security is maintained in developing COM/DCOM Models.
5. What are the advantages of developing application using COM technology.
6. Explain the term COM clients with example and describe how it differ from COM server.
7. Explain in detail about the ACID Property and tell how it is helpful in Software Development.
8. Is it possible to write COM Program using existing OLE Technology? Write a note on it.
9. What is Merrage Queuing and how it is helpful in Windows Environment and when it is used?
10. Write a simple code in C++ or any other language, that demonstrate the use of COM Component.