Printed Pages:2

Paper Id: 214427

Sub Code: RCAE12

Roll No. | | | | | | | |

## MCA (SEM IV) THEORY EXAMINATION 2017-18 CLIENT SERVER COMPUTING

Time: 3 Hours Total Marks: 70

**Note:** Attempt all Sections. If require any missing data; then choose suitably.

#### **SECTION A**

### 1. Attempt *all* questions in brief.

 $2 \times 7 = 14$ 

- a. Draw the three tier architecture of DBMS.
- b. Differentiate between stateful and stateless servers.
- c. What is dynamic data exchange?
- d. What do you understand by DDE?
- e. Describe these protocols: TELNET, FTP, SMTP.
- f. Write about tape optical disk.
- g. Explain CGI in brief.

#### **SECTION B**

#### 2. Attempt any three of the following:

 $7 \times 3 = 21$ 

- a. Discuss the role of client in client/server computing and also explain the various services provided by client.
- b. List and explain the sequence of events during remote procedure call?
- c. Write short notes on the following:
  - 1) Ethernet
  - 2) UNIX workstation.
- d. What are different hardware and software for end-users? Explain them in detail.
- e. What are the role of training in successful deployment of Client/ Server Computing systems? Explain various options to accomplish the training of staff.

## **SECTION C**

#### 3. Attempt any *one* part of the following:

 $7 \times 1 = 7$ 

- (a) Draw the block diagram of client/server architecture and explain the advantages of client/server computing with the help of suitable example.
- (b) Explain about the various client server system development Tools.

## 4. Attempt any *one* part of the following:

 $7 \times 1 = 7$ 

- (a) What is Network operating system. Discuss its advantages.
- (b) Describe Object Linking and Embedding (OLE) with an example.

## 5. Attempt any *one* part of the following:

 $7 \times 1 = 7$ 

- (a) Briefly describe PC level processing unit in client/server computing.
- (b) What are various hardware requirements in a typical client/server under network environment?

## 6. Attempt any *one* part of the following:

 $7 \times 1 = 7$ 

- (a) Write and describe various types of data storage system. Give merits and Demerits of each.
- (b) Briefly describe the following terms in Client/Server computing environment:
  - 1) Protection Devices
  - 2) RAID

# 7. Attempt any *one* part of the following:

 $7 \times 1 = 7$ 

- (a) List and explain the training advantages of GUI application.
- (b) What are different client server computing enabling technologies? Explain about Expert System.