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BCACAC 313

Credit Based Fifth Semester B.C.A. Degree Examination, Nov./Dec. 2018
(Common to all Batches)
WEB DEVELOPMENT IN .NET

Time : 3 Hours

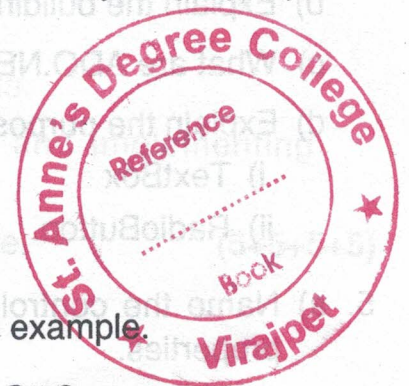
Max. Marks : 100

Note : Answer any ten questions from Part – A and any one full questions from each Unit of Part – B.

PART – A

(10×2=20)

1. a) Name the tag used for rolling display in HTML. Write any two attributes and use of it.
- b) Differentiate inline and embedded styles.
- c) What is WAI-ARIA ? What is its purpose ?
- d) Write the necessary tag used to draw a triangle in HTML5 with blue color, whose coordinate values are (10, 50), (100, 100) and (10, 100).
- e) What are the different options used to specify the RepeatLayout property of the CheckBoxList ?
- f) What is PCDATA ?
- g) How do you define constants in C# ?
- h) What is DTD ? List the types.
- i) Write the syntax of creating Web Server Control. Give example.
- j) What is “fall through” in switch ? How it is achieved in C# ?
- k) What is delegate ? Why it is used ?
- l) Differentiate value type and reference type.



P.T.O.

2. a) Explain the structure of HTML document with syntax and example.
b) Write a note on video on web.
c) Explain with example how frames are created.
d) Write a note on GEO location. (5+5+5+5)
3. a) What is Ordered List ? Explain with example, the tags used to create it.
b) Explain with example, how arcs are drawn in HTML5.
c) Explain the following tags with their usage and attributes.
i)
ii) <PRE>
iii) <HR>
iv) <SUB>
v) <DIV>
d) List and explain the various structural elements used in HTML5. (5+5+5+5)

Unit - II

4. a) List the differences between ASP and ASP.NET.
b) Explain the building blocks of ASP.NET.
c) What are ADO.NET objects ? Explain any four ADO.NET objects.
d) Explain the purpose and any two methods of the following controls :
i) TextBox
ii) RadioButton. (5+5+5+5)
5. a) Name the control used in ASP.NET for banner advertising. Explain its properties.
b) Write any five differences between XML and HTML.
c) Explain any two validator controls with their attributes.
d) Explain the architecture of ASP.NET. (5+5+5+5)



Unit – III

- 6. a) Write a short note on UDDI.
- b) With suitable example, explain the different data types used in C#.
- c) What are command line arguments ? Explain with example.
- d) List and explain the different states of ASP.NET application. **(5+5+5+5)**
- 7. a) Write any five differences between Java and C#.
- b) What is Deployment ? Explain the different types of Deployment project.
- c) What is Type Conversion ? Explain the different types.
- d) Explain the security mechanism used in ASP.NET. **(5+5+5+5)**

Unit – IV

- 8. a) What is Boxing and Unboxing ? Explain with example.
- b) Explain the structure of C# program with example.
- c) What is Method overloading ? Explain with suitable example.
- d) Explain the following looping structure :
 - i) while
 - ii) foreach. **(5+5+5+5)**
- 9. a) List the different types of passing parameters to a method. Explain any two types.
- b) What is Constructor ? Explain with syntax and example.
- c) What is Interface ? Explain defining, extending and implementing interface.
- d) Explain the various forms of 'if' statement with example. **(5+5+5+5)**

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BCACAC 312

Credit Based Fifth Semester B.C.A. Degree Examination, Nov./Dec. 2018
LINUX ENVIRONMENT
(Common to all Batches)

Time : 3 Hours

Max. Marks : 100

Note : Answer any ten questions from Part – A and any one full question from each Unit in Part – B.

PART – A

(10x2=20)

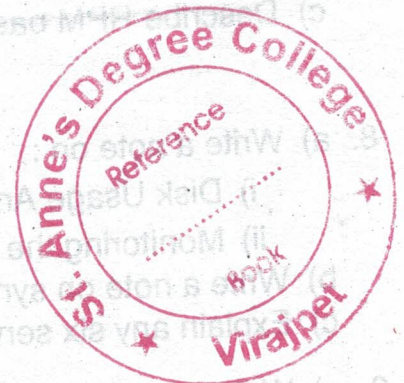
1. a) What are the companies involved in developing multics ?
- b) List any two characteristics of UNIX file system.
- c) Write a short note on special files.
- d) What are pipes ? Name two kinds of pipes.
- e) What are the three mechanisms of system V IPC ?
- f) What is lseek system call ?
- g) What is freeware software?
- h) What do you mean by X-Window system ?
- i) Write a short note on Linux File Manager.
- j) What is meant by GParted in Linux distributions ?
- k) Define P2P networking.
- l) Define and expand the term URL.

PART – B

Unit – I

2. a) Explain the various fields of a disk i-node.
- b) Explain the high-level architecture of UNIX system with a neat diagram.
- c) Explain the various services of UNIX operating system. **(8+7+5)**
3. a) Explain the Kernel architecture of the UNIX system with a neat diagram.
- b) Explain the buffer header with a neat diagram.
- c) Explain bread algorithm. **(8+7+5)**

P.T.O.



**Unit – II**

4. a) Define and explain the following system calls with syntax :
- i) read
 - ii) mknod
 - iii) close
 - iv) mount
- b) With the help of the diagram explain the kernel to driver interface for system call.
- c) Write a note on disk driver.

(8+7+5)

5. a) Explain link and unlink system calls.
- b) Name the functions of line discipline.
- c) Explain the process tracing.
- d) Explain socket model with diagram.

(5+5+5+5)**Unit – III**

6. a) With diagram explain the components of GNOME Desktop Startup Screen.
- b) Write a note on managing files and folders in Linux.
- c) Explain the features of Linux.

(8+6+6)

7. a) With diagram briefly explain the components of Linux window.
- b) Explain different desktop applications available in Linux Distributions.
- c) Describe RPM based distributions and Deb based distributions.

(8+6+6)**Unit – IV**

8. a) Write a note on :
- i) Disk Usage Analyzer
 - ii) Monitoring the system.
- b) Write a note on synaptic package manager.
- c) Explain any six services provided by the Internet.

(8+6+6)

9. a) Write a note on :
- i) Computer network
 - ii) Websites.
- b) Write a note on powers of an administrators in LINUX OS.
- c) Write the uses of the following internet applications in LINUX :
- i) gFTP
 - ii) Filezilla
 - iii) Chromium.

(8+6+6)

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BCACAC 314

Credit Based Fifth Semester B.C.A. Degree Examination, Nov./Dec. 2018
(Common to All Batches)
JAVA PROGRAMMING

Time : 3 Hours

Max. Marks : 100

Note : Answer any ten questions from Part – A and any one full question from each Unit in Part – B.

PART – A

1. a) What is Bytecode ?
- b) Mention two ways of writing comments in Java.
- c) Define Stream. Name any two pre-defined stream classes.
- d) What are Irregular Arrays ?
- e) What is the purpose of super() in Java ?
- f) What are static variables ?
- g) What is Multithreading ?
- h) List any 4 API packages of Java.
- i) Differentiate Components and Containers.
- j) What is an Applet ? Name any 2 types of applets.
- k) What is a Listener ?
- l) Name any four Swing layouts.



PART – B

Unit – I

2. a) List and explain the primitive data types in Java.
- b) Differentiate Character Stream and Byte Stream. With an example explain the process of reading a string from the keyboard.
- c) With syntax and example explain the use of labelled continue statement.
- d) Explain any three forms of FOR loop with suitable examples. **(5+5+4+6)**

P.T.O.



3. a) Explain any six features of Java.
- b) Explain automatic type conversion with suitable example.
- c) Write Java code to find the sum of first 'n' natural numbers.
- d) Explain various types of if statements with syntax and example. (5+5+4+6)

Unit – II

4. a) Explain the different types of access modifiers in Java.
 - b) Explain any five string methods with syntax and examples.
 - c) Explain Multi-level inheritance with example.
 - d) What is an abstract class ? What are its features ? Give example. (5+5+6+4)
5. a) With an example explain Command Line Arguments.
 - b) What is a class ? Explain how objects are created from a class in java with an example.
 - c) What is a Constructor ? Explain Constructor overloading with an example. (6+6+8)

Unit – III

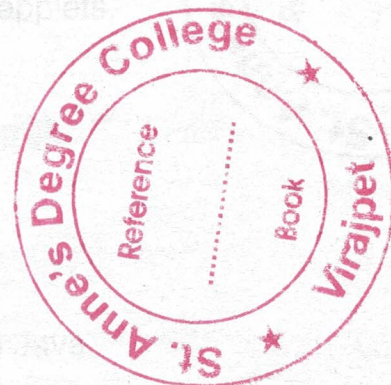
6. a) List and explain any six thread methods.
 - b) What are exceptions ? Explain with an example the mechanism of Exception Handling.
 - c) How do you create and implement an interface in Java ? (6+8+6)
7. a) Define Thread. With an example explain how to create a thread by using Runnable interface and by using Thread class.
 - b) List and explain any five built in exceptions in Java.
 - c) Explain the creation and usage of package. (8+5+7)

QP 00131



Unit – IV

8. a) List and explain the components of Delegation Event Model.
b) Explain the complete Applet skeleton.
c) Write notes on :
i) JButton
ii) JTextField. (6+7+7)
9. a) Write a note on Menu creation.
b) What is the purpose of Mouse Listener Interface ? With syntax and example explain any three methods of MouseListener Interface.
c) Define Layout Manager. With an example explain FlowLayout.
d) Explain the process of adding and removing components to a container. (4+7+4+5)



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BCACAC 315

**Credit Based Fifth Semester B.C.A. Degree Examination, Nov./Dec. 2018
(Common to All Batches)
DISTRIBUTED COMPUTING**

Time : 3 Hours

Total Marks : 100

Note : Answer any ten questions from Part – A and any one full question from each Unit in Part – B.

PART – A

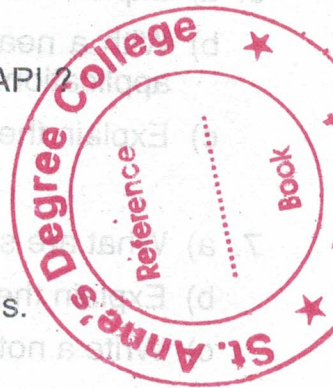
1. a) What is Distributed Computing ? (10×2=20)
- b) What are the four primitive operations of IPC ?
- c) Write the diagram of architecture of distributed applications.
- d) What do you mean by peer to peer paradigm ?
- e) Differentiate UDP and TCP.
- f) Which are the two types of sockets in stream mode socket API ?
- g) Define echo protocol.
- h) What are the classifications of reliable multicast system ?
- i) What do you mean by daytime service ?
- j) List the four well known toolkits for distributed object systems.
- k) What do you mean by stub and skeleton generation ?
- l) What are the layers used in client side architecture of java RMI ?

PART – B

Unit – I

2. a) What are the different forms of computing ? Explain any three.
- b) Explain with diagram IPV4 address scheme.
- c) Explain synchronous send and asynchronous receive scenarios with diagram. (7+5+8)

P.T.O.





3. a) Write the architecture of distributed applications and explain briefly.
b) What do you mean by concurrent programming ? Explain its types.
c) With an example, explain Event diagram and Sequence diagram. (5+8+7)

Unit - II

4. a) What do you mean by distributed object paradigms ? Explain the RMI Paradigm and ORB Paradigm.
b) What are connectionless and connection oriented datagram sockets ? Explain with diagrams.
c) Write a note on secure socket API. (8+7+5)
5. a) Explain different trade-offs of distributed computing paradigm.
b) Explain the network service paradigm and mobile agent paradigm with neat diagrams.
c) Write a note on collaborative application (Groupware) paradigm. (7+8+5)

Unit - III

6. a) Explain client-server distributed computing paradigm with a neat diagram.
b) With a neat diagram explain the software architecture for a client server application.
c) Explain the different operations involved in an archetypal multicast API. (7+7+7)
7. a) What are stateful servers ? Briefly explain the two states of information.
b) Explain the mechanism of testing a network service.
c) Write a note on atomic order reliable multicasting. (7+7+7)

Unit - IV

8. a) With a neat diagram explain the Java RMI architecture.
b) What do you mean by Remote Procedure Call ? Differentiate it by a local procedural call with diagram and explain it.
c) Write the difference between RMI and socket API. (8+6+6)
9. a) With an example explain a sample RMI application in Java.
b) With a neat diagram explain stub downloading.
c) Write a note on RMI security manager. (10+5+5)

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BCACAC 318

Credit Based Fifth Semester B.C.A. Degree Examination, Nov./Dec. 2018

(Common to all Batches)

LAMP TECHNOLOGY

Elective Stream – II

Time : 3 Hours

Max. Marks : 100

Note : Answer **any ten** questions from Part – A and **one full** question from **each** Unit of Part – B.

PART – A

(10×2=20)

1. a) What is RPM ? What is its use ?
- b) What is swap partition ? What is its maximum limit in RedHat Linux ?
- c) Differentiate process and daemons.
- d) List any two important features of Apache.
- e) What is the use of VirtualHost directive in the httpd.conf file ?
- f) Specify the purpose of DocumentRoot environment entry in httpd.conf file.
- g) What is a PHP file? List any two features.
- h) What is BLOB ? List different types of BLOBs available in MySQL.
- i) Write commands which makes sure that MySQL starts at the time of the machine boots.
- j) Explain \$ _ SERVER variable. List any two options of it.
- k) Differentiate include() and require() functions.
- l) Give syntax of mail() function in PHP.

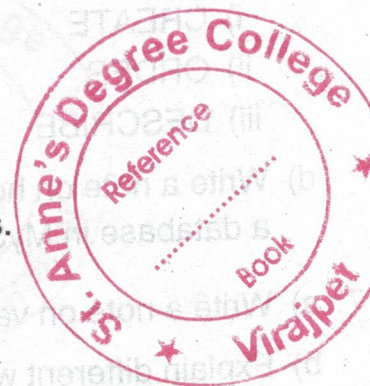
PART – B

UNIT – I

2. a) Explain in brief any five Linux Packaged Distributions.
- b) Explain in brief
 - i) ln
 - ii) mv
 - iii) locate
 - iv) chkconfig
 - v) which.
- c) Assuming a 10GB disk, recommend Linux partitions in it.

(5+10+)

P.T.





3. a) List and explain any five Linux commands.

b) Explain in brief

i) /bin

ii) /usr/tmp

iii) /boot

c) Explain standard shortcuts used with cd command.

(10+6+4)

UNIT – II

4. a) Write a note on configuring Apache Web Server.

b) List and explain any five important entries in httpd.conf file.

c) Explain Name based Virtual Host.

(5+10+5)

5. a) Explain IP based Virtual Host and Name based virtual host.

b) Write a note on Apache Modules.

c) List any five values to the options directives.

(10+5+5)

UNIT – III

6. a) With the help of a diagram explain the request/response Internet paradigm.

b) List benefits and drawbacks in running PHP as Server Side Scripts.

c) Explain with example the following MySQL commands

i) CREATE

ii) ORDER

iii) DESCRIBE

d) Write a note on how to create, use and grant permission for a new user on a database in MySql.

(5+4+6+5)

7. a) Write a note on various integer, date and character data types in MySql.

b) Explain different ways in which SELECT command is used in MySql.

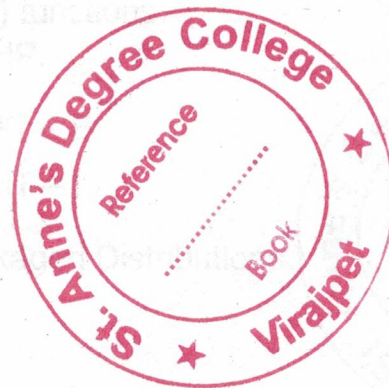
c) Explain the execution of a CGI program with the help of diagram and example.

(6+8+6)



UNIT – IV

8. a) List and explain in brief :
- i) Assignment operators
 - ii) Comparison operators.
- b) Write a note on arrays in PHP.
- c) Explain the following functions with syntax
- i) fopen ()
 - ii) fread ()
- d) What is a cookie ? Explain how to create and retrieve cookies in PHP. **(6+5+4+5)**
9. a) Explain how to establish connection to database and execute query on database in PHP. Give example.
- b) Explain date() function with its syntax. List and explain any four format strings which can be used with it.
- c) Explain mail() function with its syntax. Give example.
- d) Write a note on strings in PHP. **(5+6+6+3)**



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BCACAC 317

Credit Based Fifth Semester B.C.A. Degree Examination, Nov./Dec. 2018

(Common to all Batches)

Elective Stream – II

MANAGEMENT INFORMATION SYSTEMS

Time : 3 Hours

Max. Marks : 100

Note : Answer any ten questions from Part – A and one full question from each Unit in Part – B.

PART – A

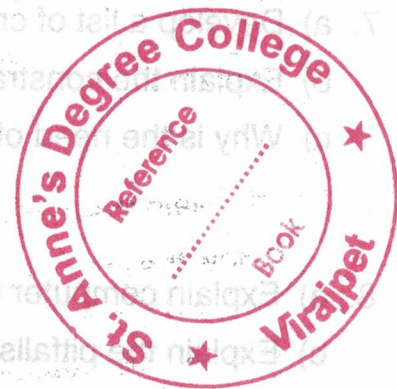
(10×2=20)

1. a) Define a system.
- b) What are the tasks and functions of management ?
- c) What is the importance of planning in a management ?
- d) What do you mean by decision making ?
- e) What are the phases of MIS development ?
- f) What are the two classifications of system constraints ?
- g) Write any two characteristics of Decision-Assiting Information Systems.
- h) What is a Gantt chart ?
 - i) What are the components of testing ?
 - j) What is cutover ?
- k) What is a cost schedule ?
- l) What are the steps of system development ?

PART – B

Unit – I

2. a) Explain system approach to organizing.
- b) Write a note on Classical Process Theory.
- c) Explain the increase in the complexity of business.





3. a) Explain the need of MIS within the company.
b) With the help of the diagram explain strategic planning process.
c) Explain the major factors that affect the productivity. (5+7+8)

Unit – II

4. a) Write a note on programmed decision making and MIS.
b) Write a note on Marketing Information System.
c) Explain the inter relation between strategic planning and project planning in MIS. (6+6+8)
5. a) Write a note on Personnel Information System.
b) Explain with the help of the diagram the Basic Information System.
c) Explain the needs and objectives of MIS planning. (6+7+7)

Unit – III

6. a) Explain the process of setting system objectives.
b) How the information sources are determined in the system design? Explain the categories of sources of information. (6+8+6)
c) Explain the process of documenting the system design.
7. a) Develop a list of criteria for company's alternative conceptual design.
b) Explain the constraints of MIS design with a neat diagram.
c) Why is the need of information for managers and management? (7+7+6)

Unit – IV

8. a) Explain computer related acquisitions for implementation.
b) Explain the pitfalls in MIS development.
c) Explain the process of MIS evaluation. (5+9+6)
9. a) Explain the developing procedures for implementation.
b) Explain the control and maintenance of MIS.
c) Explain the various implementation issues in MIS. (6+7+7)

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BCACAC 311

Credit Based Fifth Semester B.C.A. Degree Examination, Nov./Dec. 2018
SOFTWARE ENGINEERING
(Common to all Batches)

Time : 3 Hours

Max. Marks : 100

Note : Answer any ten questions from Part – A and one full question from each Unit of Part – B.

PART – A

(10×2=20)

1. a) Give the IEEE definition of Software and Software Engineering.
- b) Expand KDLOC and SCM.
- c) What is a Module ?
- d) What are design walkthroughs ?
- e) What is Data Dictionary ?
- f) What is Data abstraction ?
- g) Define most abstract input and most abstract output.
- h) Define test case.
- i) Define Coupling.
- j) Define error and failure.
- k) What is Unit Testing ?
- l) Mention any two important aspects of WinRunner.

PART – B

UNIT – I

2. a) Explain Software Problems.
- b) Explain any three characteristics of software process.
- c) Explain the working of waterfall model with the help of a diagram. **(7+6+7)**
3. a) Explain different phases of phased development process.
- b) Explain the Spiral Model with the help of a diagram.
- c) Explain SCM life cycle of an item. **(8+7+5)**

P.T.O.



UNIT – II

4. a) Explain Data Flow diagram with an example.
 b) Explain the characteristics of SRS.
 c) Write a note on SDM strategy. (6+7+7)
5. a) Explain the components of SRS.
 b) Write a note on decision table.
 c) Define cohesion. Explain different types of cohesion. (8+4+8)

UNIT – III

6. a) Explain the verification methods of detailed design.
 b) Explain structured programming.
 c) Explain PDL with suitable example. (8+5+7)
7. a) Write a note on Logic/Algorithm design.
 b) Explain symbolic execution and execution tree.
 c) Explain the concept of information hiding. (8+8+4)

UNIT – IV

8. a) Explain control flow based testing.
 b) Write a note on adaptive and corrective maintenance.
 c) Write a note on Silk Test. (6+8+6)
9. a) Explain the Equivalence class partitioning.
 b) Explain data flow based testing.
 c) Write the important features of SQA Robot and LoadRunner. (7+6+7)