UNIVERSITY CENTRE FOR DISTANCE LEARNING
CHAUDHARY DEVILAL UNIVERSITY SIRSA

BCA-3rd year

Visual programming using Visual Basic (311)

ASSIGNMENT-I

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. What is IDE? Explain the components of IDE.
2. Explain the various Data types supported by VB.
3. What is procedure? Explain the types of procedures with example.
4. Explain any five intrinsic controls with properties.
5. Explain the following: i) MsgBox Function ii) Input Box.
6. How you can create controls at runtime? Explain.
7. Explain data connectivity with ADO data control.
8. What is class module, how will you add a new class to VB project.
9. What is Common Dialog Control? Explain any two dialog Boxes of Common Dialog Boxes control.
10. What is an Active X control? How you can create your own Active X control?

ASSIGNMENT-2

Attempt any five questions .All questions carry equal marks   **Max Marks: 15**

1. What is event-driven programming? List the various events.
2. What is a variable? How it is declared? Discuss the scope and lifetime of variable.
3. Which looping constructs are used in VB? Explain.
4. State the difference between: i) List Box and Combo Box ii) Image control and picture Box control iii) Load and show method and show ().
5. What is control array? Explain it using a program.
6. Explain the use of MDI forms.
7. Explain the procedure connectivity with data base using Data control.
8. What are the three main features of OOP language? Explain encapsulation with example.
9. What is menu? Explain pop- up menus.
10. Explain the parameter passing mechanisms supported by VB.

BCA-3rd year

Software Engineering-312

Assignment-I

Attempt any five questions .All questions carry equal marks.   **Max Marks: 15**

1. What is software engineering? Also define software characteristics.
2. What do you mean by software life cycle model? Also define software which is used for RISK.
3. Explain the detailed COCOMO model.
4. What do you mean by Software Risk? Explain.
5. Explain all the techniques which are used for Requirement Elicitation.
6. Explain the following terms: i) Data Dictionary   ii) Verification and Validation.
7. What do you mean by Module Coupling? Explain all its types in details.
8. What is Black Box Testing? Explain Equivalence class testing.
9. Explain various levels of testing.
10. What is software Maintenance? Explain Boem's Model in detail.

Assignment-2

Attempt any five questions .All questions carry equal marks.   **Max Marks: 15**

1. What do you mean by software? Also explain Software Crisis.
2. Explain Waterfall Model. Also define advantages and disadvantages.
3. Explain the criteria for selection of Software life cycle Models.
4. Explain Basic COCOMO Model used for estimating cost of software.
5. What is Software Risk? Explain in detail.
6. What do you mean by Requirement Engineering? Explain its steps
7. What is Module Cohesion? Explain its types in details.
8. What is White Box testing? Explain path testing in details.
9. Explain various levels of testing.
10. What do you mean by software Maintenances.Explian its categories also

BCA-3rd year

Programming with Java (313)

Assignment-1

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. What do you mean by JDK? Explain its components.

2. How Java changed the internet?

3. Discuss the selection statements supported by Java using suitable program for each.

4. How can you differentiate the abstract classes and interfaces in Java? Explain.

5. Discuss the usage of super keyword in Java with the help of program.

6. What is an Interface? What is the major difference between interfaces and classes?

7. Discuss the usage of 'throw' and 'finally' keyword with the help of program.

8. What is a Thread? Explain the JAVA Thread Model.

9. Why is type conversion and type casting required in Java?

10. What is an applet? Discuss the life cycle of an applet.

ASSIGNMENT-2

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. Explain the following: i) Byte code   ii) JDK

2. Which data types are defined in Java?

3. How can you declare a variable? Also discuss the scope and lifetime of a variable.

4. How constructors can be overloaded in Java?

5. How final keyword can be used to prevent overriding and inheritance? Explain.

6. How is a multilevel hierarchy created in Java?

7. How a package is defined? Also explain the access mechanisms used.

8. How interfaces are implemented?

9. How multiple threads can be created in Java?

10. Explain the following: i) multiple catch blocks   ii) applet methods

BCA-3rd year

Computer Networks (314)

Assignment -1

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. What is a computer network? Discuss the classification of computer networks.

2. Why ALOHA is used as a multiple access protocol?

3. Explain the difference between circuit and packet switching.

4. Explain synchronous and asynchronous TDM.

5. What is a cyclic code? Explain CRC.

6. What is a Checksum? How it can be used to detect the errors?

7. What is framing? Explain the variable size framing.

8. Write the categories of routing algorithms. Explain Hierarchical routing.

9. Which principles are used for congestion control? Also explain load shedding.

10. What do you mean by cryptography? Explain asymmetric key cryptography.

Assignment -2

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. Explain the layers of OSI model.
2. What is a cyclic code? Explain CRC.
3. Explain the transmission modes.
4. What is a transmission media? Explain guided media.
5. Explain the media which is used for wireless communication.
6. Name the various multiple access protocols. Also explain CSMA.
7. State the optimality principle. Explain Distance Vector Routing.
8. What do you mean by closed loop congestion control? Which policies are used in it?
9. Write short note on: i) FTP   ii) WWW
10. Explain DNS.

BCA-3rd year

Operating System (315)

ASSIGNMENT-1

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. What is operating system? Explain various type of operating system.

2. Discuss the operating system services.

3. How many states a process can be? Discuss the state transition.

4. Discuss the preemptive and non-preemptive SJF with example

5. Discuss the necessary condition for occurrence of deadlock. Also explain deadlock prevention schemes

6. Explain the Bankers algorithm with example.

7. Explain internal and external fragmentation disk.

8. Explain look and scan disk scheduling algorithm.

9. What is segmentation?

10. What is page replacement policy? Describe following: i) LRU replacement ii) Optimal replacement

ASSIGNMENT-2

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. Why operating system is called as a resource manager?

2. Explain i) system calls ii) system programs

3. What is dead lock? Explain techniques of dead lock detection and recovery.

4. What is file?

5. Explain: i) PCB and its attribute ii) scheduling criteria

6. Difference between thread and process. Explain any one thread model.

7. Explain the round robin scheduling algorithm and priority scheduling algorithm with example

8. Explain the demand paging.

9. What is Belady Anomaly? How it is related to FIFO?

10. Discuss various storage allocation strategies.

BCA-3rd year

Management Information System (317)

Assignment -1

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. What do you mean by MIS? Discuss the various levels of management.

2. Define data model. Explain Relational data model.

3. How can we develop information system solutions?

4. Discuss the role of data base management in information system.

5. Discuss the role of difference type of information system in business organization.

6. How we can security data explain with suitable example?

7. What are the ethical challenges of information technology?

8. What is the use of information system in HRM, accounting and finance?

9. Which level of management deals with executive information system?

10. How can we implement and control information system?

Assignment -2

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. What is information system? Explain different levels of MIS.

2. Explain the system approach to problem solving.

3. How will you measure quality of information? Explain.

3. Describe decision support system in detail.

4. Explain the role of information resource management in MIS.

5. Define the following: i) Computer crime ii) planning in information system

6. Explain how expert systems help in decision making?

7. What is the use of information system in marketing and manufacturing? Explain.

8. What are the ethical challenges faced by information system?

9. What is transaction processing? Explain one of transaction processing scheme/ system with example.

10. Explain how expert systems help in decision making?

BCA-3rd year

SOFTWARE TESTING AND QUALITY ASSURANCE (318)

ASSIGNMENT- 1

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. What is testing? Also discuss features of test cases.

2. Differentiate between White-box and Black-box testing.

3. Describe the following briefly: i) Alpha and Beta Testing   ii) Cyclomatic complexity

4. What are Software metrics? How these are useful in testing?

5. Explain the following: i) FTR   ii) Unit testing and integration testing

6. Define Software reliability. How is it associated with testing? Also discuss software reliability metrics.

7. What is software quality? How is it related with testing? Also explain software quality models briefly.

8. Write short note on the Software safety and Hazards Analysis.

9. Discuss the object oriented testing methods.

10. Explain the following: i) metrics for analysis ii) importance of quality assurance

ASSIGNMENT- 2

Attempt any five questions. All questions carry equal marks.   **Max Marks: 15**

1. Explain Boundary value analysis with suitable example.

2. Write a short note on Equivalence partitioning technique.

3. What is object oriented testing? Explain the various issues.

4. Write a short note on Structured Walk through technique.

5. Distinguish between verification and validation.

6. What is interface testing? State difference between interface testing and integration testing.

7. What is Acceptance testing? Explain.

8. Explain the dynamic Analysis tools.

9. What is the SQA? Explain SQA plan.

10. Explain the various reliability models?