1. Explain the features of abstraction and encapsulation.
   (b) Explain the role of Java language in internet.

2. (a) Explain the concept of tokens of Java.
   (b) Explain the various decision-making and looping structures in Java.

Answer any FIVE questions.
All questions carry equal marks.

Time: Three hours
Maximum: 100 marks

JAVA PROGRAMMING
B.Sc. DEGREE EXAMINATION, DECEMBER 2010
Part III — Computer Science
Second Year

(For the candidates admitted from 2007 onwards)
1. Explain the various byte stream classes in Java.

2. Write a Java program to draw the various ellipse shapes in an applet window.

3. Describe the concept of abstract classes in Java.

4. Write a Java program to read the various AWT facilities of Java.

5. Write a Java program to read 10 elements of an array and to store them in an array and integer (12th element in the same array).

6. Explain the operations with regard to exception handling techniques of Java.

7. If there is any error handling in the same try to access the 12th element in the same array.

8. Explain the various character stream I/O classes in Java.

9. Explain the implementation process of multiple inheritance in Java.

10. How an object array is created in Java?

11. Arrays in Java environment.

12. Describe the implementation issues for Java class methods and attributes.
4. Develop the concept of constructors.
   b) Develop a C++ program with class

3. Write the procedure of overloading function.
   a) Develop a C++ program with class
   c) Write the procedure of defining member functions.

2. Give a note on function overloading concept.
   a) Write a C++ program to find the volume of a
   cylinder using the function overloading concept.
   b) Write the procedure of defining member functions.

1. Describe the concepts of basic, derived and user
   defined data types with suitable examples.

Answer five questions.

Time: Three hours
Maximum: 100 marks

C++ PROGRAMMING

Part III — Computer Science

Second Year
B.Sc. Degree Examination, December 2010

For the candidates admitted from 2007 onwards

D.P. Code: [07-DSC-04]

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5. Discuss the procedure of converting one class type
   into another class type. Illustrate a program that
   uses two classes and shows how to convert data of
   one type to another.

4. Constructors to demonstrate the passing of
   arguments to the constructor function.

3. Explain the concept of constructors.

2. Write a C++ program with I/O operations on
   binary files.

1. Write a C++ program with I/O operations on
   manipulations.

...
1. Explain the basic Loader functions.
2. Explain one pass and multi pass assemblers.
3. Explain the general purpose macro processors.
4. Discuss machine dependent code optimization.

With example.
2. Discuss the following with examples:

(a) WHERE clause
(b) WHERE clause
(c) HAVING clause
(d) GROUP BY

3. Discuss the various DDL commands with examples.

4. What is the use of foreign keys? Explain it with examples.

5. Explain the format with respect to SQL.

6. Normalize the following to get a suitable database structure by explaining the process at each step.

7. Explain the set operations with examples.
   (a) INTERSECT
   (b) UNION
   (c) EXCEPT

8. Discuss the following:
   (a) Procedure creation and invocation
   (b) Type of procedures
   (c) Parameters of a procedure
   (d) Execution of a procedure

9. Explain with examples.

10. Explain the concept of a database management system.

Time: Three hours
Maximum: 100 marks

For the candidates admitted from 2007 onwards

B.Sc. Degree Examination, December 2010

G.P. Code: 07 DSC 09
Re: No.
1. Explain the elements of Visual Basic IDE.

2. What are the data types used in Visual Basic

3. Explain the determinant of an indeterminate.

4. Are A, B, C, and D given four numbers, find the greatest number.

5. Write a Visual Basic program to find the

6. Explain the Mouse Events.

7. Explain the Mouse Case with an example.

8. Explain the Mouse Case with suitable examples.

9. Explain the Mouse Case with suitable examples.

10. Explain the Mouse Case with suitable examples.

Question

Answer any FIVE questions.

Time: Three hours
Maximum: 100 marks

VISUAL PROGRAMMING - VISUAL BASIC

PART III - Computer Science

THIRD YEAR

B.Sc. DEGREE EXAMINATION, DECEMBER 2010

FOR THE CANDIDATES ADMITTED FROM 2007 ONWARDS

D 84

REG. NO.:
(1) Write a Visual Basic program to create a calculator using control arrays.

(2) Write a Visual Basic program to create a calculator using arrays.

(3) Explain the Dynamic arrays with an example.

(4) Explain descending order.

(5) Write Visual Basic Program to read in integers and display the sorted integers in descending order.

(6) Write the Event Procedures and Function Procedures.

(7) Explain the Menu Bunch method.

(8) Write short notes.

(9) How to build binary access files.

(10) Explain a sequential file.

(11) How to build binary access files.

(12) Explain various control tools in the toolbox.

(13) How to open/rd and write/rd.

(14) How to get input data and displayed.
1. Give a detailed description on test defect metrics.
   
2. Describe the procedure of static testing.
   
3. Write notes on the following black-box testing methods:
   (a) Boundary value analysis.
   (b) Positive and negative testing
   (c) Decision tables.

4. Compare and contrast A model with modified A model.

5. Discuss the concepts of performance tuning with beta testing technique.

6. List and explain various steps of doing regression and performance benchmarking.

7. Discuss the acceptance testing procedure.

8. Explain the procedure of scenario testing.

9. Give a note on phases of software project.

10. All questions carry equal marks.

Time: Three hours

Maximum: 100 marks

SOFTWARE TESTING

Part II — Computer Science

Third Year

B.SC. DEGREE EXAMINATION, DECEMBER 2010.
(for the candidates admitted from 2007 onwards)

G.P. Code: [7 DSC II]

Reg. No.: [ ]