

5. Explain constructor and destructor with example program in C++.
  6. Define: operator overloading in C++. Write an example program for each operator.
  7. Explain various types of Inheritance in C++.
  8. (a) Explain with an example the Template.  
(b) Explain with an example on Exception handling.
- 

Reg. No. : .....

**D 1025**

**Q.P. Code : [07 DSCA 04]**

(For the candidates admitted from 2007 onwards)

B.C.A. DEGREE EXAMINATION, MAY 2013.

Second Year

Part III — Computer Application

PROGRAMMING WITH C AND C++

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. Explain the structure of a C program. Write an example program.
2. Write various looping and decision statement in C. Explain with example.
3. Define structure. Explain how to initialize structure within structure in C. Give its syntax and example program.
4. Explain with an example switch case statement in C. Write an example program.

4. Explain with an example merge sort and its algorithm.
  5. Explain various file organization with example.
  6. (a) Explain with example of structure and its operations.  
(b) Explain evaluation of expressions.
  7. Explain with neat diagram of various linked list and its operations.
  8. (a) Explain sequential and Fibonaeci searching.  
(b) Explain k-way merging with an example.
- 

Reg. No. : .....

**D 1026**

**Q.P. Code : [07 DSCA 05]**

(For the candidates admitted from 2007 onwards)

**B.C.A. DEGREE EXAMINATION, MAY 2013.**

**Second Year**

**Computer Application**

**Part III — DATA STRUCTURE AND ALGORITHM**

**Time : Three hours**

**Maximum : 100 marks**

**Answer any FIVE questions.**

**All questions carry equal marks.**

**(5 × 20 = 100)**

1. (a) Write an overview of an algorithm and explain the analysis of algorithms.  
(b) Explain two dimensional array representations with example.
2. Define stack. Explain its operations with algorithm.
3. (a) Explain polynomial addition with example.  
(b) Explain sparse matrix with example.

6. Explain fixed partitioned memory management.
  7. Explain any five page replacement algorithm.
  8. Explain the use of remote procedure calls.
- 

Reg. No. : .....

**D 1028**

**Q.P. Code : [07 DSCA 07]**

(For the candidates admitted from 2007 onwards)

**B.C.A. DEGREE EXAMINATION, MAY 2013.**

**Second Year**

**Part III-Computer Application**

**OPERATING SYSTEMS**

**Time : Three hours**

**Maximum : 100 marks**

**Answer any FIVE questions.**

**All questions carry equal marks.**

1. Explain the objectives and functions of an operating system.
2. Explain the features of LINUX.
3. Explain the features of graphical user interface and the process of booting.
4. Explain the various disk space allocation methods.
5. Explain the process states and process state transitions.

6. Explain the various techniques used in software design.
  7. Explain the various aspects in unit testing and debugging.
  8. (a) Explain enhancing maintainability during development.  
(b) Explain the managerial aspects of software maintenance.
- 

Reg. No. : .....

D 1027

Q.P. Code : [07 DSCA 06/  
07 DSC 06]

(For the candidates admitted from 2007-08 onwards)

B.C.A./B.Sc. DEGREE EXAMINATION, MAY 2013.

Second Year

Part III — Computer Applications/Computer Science

SOFTWARE ENGINEERING

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. Explain any ten quality and productivity factors in software development and maintenance.
2. Explain the various aspects in planning the development process.
3. Explain the different cost estimation strategies.
4. Explain the normal specification techniques.
5. Explain the concepts in fundamental design.