

3. (a) Explain the types of inheritances.
(b) Describe the rules for operator overloading.
(10+10)
4. (a) Explain the concept of virtual and pure virtual functions.
(b) Write a program to arrange 10 numbers in ascending order.
(10+10)
5. (a) Explain the various file handling concept in C++.
(b) Write a program to copy the content of one file to another file.
(12+8)
6. (a) Explain exception handling mechanism with an example.
(b) Write about the concept of 'templates'.
(12+8)
7. (a) Write a program to find the value of nCr using function.
(b) Write a program to add two complex numbers using operator overloading. (8+12)

Reg. No. :

D 2033

Q.P. Code : [07 DSC 04]

(For the candidates admitted from 2007 onwards)

B.Sc. DEGREE EXAMINATION, DECEMBER 2013.

Second Year

Part III — Computer Science

C++ PROGRAMMING

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. (a) Distinguish between 'While' and 'Do' statements.
(b) Write a program to find the sum of numbers using function over loading. (10+10)
2. (a) Explain the rules of constructors and destructors.
(b) Explain the different types of constructors.
(10+10)

8. (a) Write a C++ program that includes all arithmetic operations to two numbers using friend function.
- (b) Write a note on 'String objects'. (12+8)
-

6. Explain the concept of variable partition multiprogramming with compaction and storage placement strategies.
 7. Describe the various seek optimization strategies in detail.
 8. (a) Write about file organization (7)
(b) Elucidate the various non – contiguous allocation schemes followed in disk management. (13)
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Reg. No. :

D 2034

Q.P. Code : [07 DSC 05]

(For the candidates admitted from 2007 onwards)

B.Sc. DEGREE EXAMINATION, DECEMBER 2013.

Second Year

Part III — Computer Science

SYSTEM SOFTWARE AND OPERATING SYSTEM

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

1. With example of a SIC/XE program, explain the machine dependent assembler features. (20)
2. Give a neat description on basic loader functions. (20)
3. Describe the macro processor design options. (20)
4. Explain the concept of Text editors in detail. (20)
5. Narrate the concept of compiler design options. (20)

4. (a) What is an interface? How is it used to implement multiple inheritance in Java? Explain. (15)
- (b) What is the use of 'protected' keyword? (5)
5. (a) Explain the thread life cycle. (8)
- (b) Explain the use of the following methods :
- (i) start ()
- (ii) sleep ()
- (iii) wait ()
- (iv) join ().
6. (a) Discuss the exception handling mechanism. (10)
- (b) With an applet program to draw a ball and to move it up and down. (10)
7. (a) Write a java program to read a file name and to display it size. (10)
- (b) Explain the methods in Input Stream. (10)
8. Discuss the following :
- (a) JVM
- (b) Abstract class
- (c) <applet> tag
- (d) Browser.
-

Reg. No. :

D 2035

Q.P. Code : [07 DSC 07]

(For the candidates admitted from 2007 onwards)

B.Sc. DEGREE EXAMINATION, DECEMBER 2013.

Second Year

Part III — Computer Science

JAVA PROGRAMMING

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

1. (a) Discuss the object oriented concepts with example. (15)
- (b) List the relational operators in Java of explain. (5)
2. Discuss the control structure in Java with suitable examples, flow control and syntax.
3. (a) Write a Java program to create a class for representing a 'PEN'. (10)
- (b) What is a constructor? Explain. (10)