



**J-0838**  
**Second Year B. Sc. Examination**  
**March/April – 2013**  
**Computer Science : Paper - III**  
**(Data Structure in C++)**

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

(1)

<p>नीचे दर्शायेव निशानीवाणी विगतो उत्तरवही पर अवश्य कपनी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : S. Y. B. SC.</p> <p>Name of the Subject : COMPUTER SCIENCE : PAPER - 3</p> <p>Subject Code No. : 0 8 3 8 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <p style="text-align: center; border: 1px solid black; border-radius: 15px; padding: 10px;">Student's Signature</p>
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- (2) Question 1 is **compulsory**.  
(3) Figures in the **right** side indicate full marks.

- 1 Answer the following : 14
- (i) Describe stack and queue.
  - (ii) Define the term class and object.
  - (iii) Differentiate constructors and destructors.
  - (iv) Describe various tree operations.
  - (v) What is LIFO ? List out various application of it.
  - (vi) What is multi dimensional array ? How to represent it ?
  - (vii) List out non overloaded operators.
- 2 (a) Explain Operator overloading. 7
- OR**
- (a) Explain selection sort with example. 7
  - (b) Explain unformatted and binary I/O files. 7
- 3 (a) Explain function overloading with example. 7
- (b) What is dequeue ? Describe it with example. 7

**OR**

- 3 (a) Explain constructors with arguments. 7  
(b) Describe the syntax and example opening and closing files. 7
- 4 (a) Write short notes on following : (any one) 7  
(i) Types of exception with example  
(ii) Binary Search with example.  
(b) Explain polish notation with example. 7
- 5 Answer any **two** from following : 14  
(a) Insertion sorting  
(b) Hierarchical Inheritance  
(c) Various queue operations.
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