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B.Sc. V-Semester Examination

CBS-Vs/5 (S)

220179

COMPUTER APPLICATIONS

Course No.: UCATE - 502

Time Allowed: 2½ Hours

Maximum Marks: 80

### SECTION-A

Note: Attempt all questions. Answer to a question should not exceed 80 words. (5×3=15)

1. Differentiate between procedural and object oriented programming.
2. Write a program to demonstrate the switch statement.
3. Discuss how objects can be declared.
4. What is the role of copy constructor?
5. Explain the use of this pointer with examples.

### SECTION-B

Note: Attempt all questions. Answer to a question should not exceed 300 words(5×7=35)

1. Discuss in detail the relational and logical operators.
2. Write a program to sort the elements of an array.
3. Write a program to illustrate operator overloading.
4. Discuss the properties of constructors.
5. What is the need of exceptional handling?

### SECTION-C

Note: Attempt any TWO questions. Answer to a question should not exceed 600 words.  
(2×15=30)

1. How abstraction and encapsulation can be implemented in C++. Explain with suitable examples. <https://www.jktopper.com>
2. Discuss calling mechanism in functions. What is the importance of return statement in the function?
3. Discuss Array of objects. Write a program to illustrate the concept of Array of objects in detail.

4. What is Constructor Overloading? Write a suitable program to illustrate the concept of overloading of constructors.
5. What are the different types of Inheritance? Write a program to illustrate multiple inheritance.