8. Write a program that emulates the DOS COPY command. That is, it should copy the contents of a character file (such as any CPP file) to another file. Invoke the program with two command-line arguments–the source file and destinatioin file like.

C > ocopy srcfile.ext destfile.ext

And show the output.

What will happen if the destination file already exists. **15**

BB-584

M. Tech. EXAMINATION, Dec. 2017

(Second Semester)

(B. Scheme) (Re-appear Only)

(CSE)

CSE-552-B

SOFTWARE DESIGN AND CONSTRUCTION

Time : 3 *Hours*]   [*Maximum Marks :* 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. Write and explain the six steps of "Architecture Trade-off Analysis Method". **15**

2. Define Coupling. Discuss the effects of coupling on the complexity of the software. List and explain any *five* categories of coupling. **15**

Unit II

3. (a) State and explain various goals of UML. **10**

(b) What is the benefit of use-case modeling ? **5**

4. (a) What is the relevance of patterns and frameworks ? **5**

(b) What information is depicted by state chart diagrams ? What are their essential components ? Explain with suitable example. **10**

Unit III

5. Define Constructor. Why is it required ? Explain the syntax of different type of constructors available in C++ with the help of suitable examples. **15**

6. (a) You are asked to design an automation system for your Institute. Propose a list of modules and classes in each module. Show the different types and levels of inheritance used. **10**

(b) What is pure virtual function ? Illustrate its use with suitable example with syntax. **5**

Unit IV

7. (a) What is the difference between a template function and function template ? **7**

(b) What do you mean by a container class ? Write any *four* uses of container class. **8**