

FACULTY OF ENGINEERING

B.E. I-Year (Supplementary) Examination, December 2016

Subject: Programming in C and C++

Time : 3 hours

Max. Marks : 75

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.**PART – A (25 Marks)**

- 1 Distinguish the terms identifier.
- 2 What is conditional operator?
- 3 What is a function? Write a syntax for declaration of a function.
- 4 What is the purpose of # define?
- 5 How is memory allocated to variables declared in a structure.
- 6 In How many modes a file can be opened? What are they?
- 7 What are hream insertion and extraction operators?
- 8 What is the advantage of inline function?
- 9 What is template?
- 10 What is an abstract class?

PART – B (50 Marks)

- 11 a) Explain block diagram of a computer with a neat figure.
b) Define i) algorithm ii) flowchart
- 12 a) Explain recursive function.
b) Write A program to print mathematical table of a given number using recursion.
- 13 a) Explain types of storage classes in C.
b) Write a program to multiply two given matrices.
- 14 Write a program to read the details of all the students in a class (of 50 students), where details include rollno, name and marks in each subject.
a) Print the average marks of each students and also the result.
b) Now print the names of students who got > 90% marks.
Using structures.
- 15 a) Write a class to invalid various operations on complex number.
b) What is a copy constructor? Give an example.
- 16 What is operator overloading? Write a program for overloading an unary operator '+'.
Using structures.
- 17 Write short notes on :
 - a) friend function
 - b) const object
 - c) access specifiers
