

Roll No.

1986

**B. E. 1st Semester
Examination – December, 2011**

**FUNDAMENTAL OF COMPT. ENGG & PROGRAMMING
in C**

Paper : CSE-101-E

Time : Three hours]

[Maximum Marks : 100

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

1. (a) What is computer architecture ? Explain in detail alongwith diagram ? 10
- (b) Convert the following hexadecimal number to octal number system : 10
 - (i) OXe4
 - (ii) OX45f
 - (iii) OX2eda
2. (a) What is an operating system ? List different types of operating system and what are main functions performed by an operating system ? 10
- (b) What is a language processor ? What are 4 types of language processor. 10

3. (a) Write the syntax of different decision making statements and loops. 10
- (b) Write a program for the multiplication of 2 matrices. 10
4. What is a function ? What are different elements of a function ? What are different methods of passing structures to functions. Explain with example (for both methods). 20
5. (a) Write a program to find out whether a given string is palindrome or not. 10
- (b) Write a program using functions for fibonacci series. 10
6. Write a program using structure to gather all the information of all the books available in the library. The information must include the name of book, its publisher, date of purchase, price of the book, no. of copies available in the library. 20
7. (a) Explain different storage classes in detail. 8
- (b) Explain the basic difference between structure and union along with an example. 7
- (c) Explain abstract data types. 5
8. Write a program that will write and read the file till the end of file is encountered using functions. 20