

UNIT-II

- 3. (a) What are the main differences between the working of Interpreter and Compiler ? 10
- (b) What is the main role of Linker and Loader ? 10
- 4. (a) Write short notes on hub, switch and router. 7.5
- (b) Compare Transmission Control protocol (TCP) and Internet Protocol (IP) 7
- (c) What Protocols are used in email ? Discuss in brief. 5.5

UNIT-III

- 5. (a) What is Recursion ? Explain with the help of sample program. 10
- (b) Write a program to convert a given four digit decimal number into binary. <http://www.kuonline.in> 10
- 6. (a) Explain typecasting with the help of example. 5
- (b) Using an example, explain local and external variables and also give their scope. 5
- (c) Write a program for Matrix multiplication. 10

UNIT-IV

- 7. (a) Write a C program to compare two strings without using strcmp(). 10
- (b) Differentiate between structure and union. Write the syntax for the declaration of structure and union. 10

Roll No. Total Pages : 3

BT-1/D-12 8013

FUNDAMENTAL OF COMPUTERS & PROGRAMMING IN C
Paper-CSE-101E

Time Allowed : 3 Hours] [Maximum Marks : 100

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

UNIT-I

- 1. (a) Explain the complementary number representation in Computer systems. How negative numbers are represented ? 10
- (b) Differentiate between Windows and Linux operating system. 10
- 2. (a) Convert :
 - (i) $(732.25)_{10} = ()_2$
 - (ii) $(2BD)_{16} = ()_{10}$
 - (iii) $(110101.100101)_2 = ()_{16}$
 - (iv) $(294.4861)_{10} = ()_2$
 - (v) $(8932)_{10} = ()_{16}$ 10
- (b) Explain the main features of UNIX operating system. 10

8. (a) How files are managed in C language ? What are their utilities ? 10
- (b) Explain the operation of following functions :
- (i) fopen()
 - (ii) getc()
 - (iii) putw()
 - (iv) fscan()
 - (v) ftell(). 10