

Code: DE53/DC53 Subject: COMPUTER FUNDAMENTALS & APPLICATIONS

DiplETE – ET/CS

Time: 3 Hours

JUNE 2013

Max. Marks: 100

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q. 1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after 45 minutes of the commencement of the examination.
- Out of the remaining EIGHT Questions answer any FIVE Questions, selecting TWO questions from part A and THREE questions from part B. Each question carries 16 marks.
- Any required data not explicitly given, may be suitably assumed and stated.

Q.1 Choose the correct or the best alternative in the following: (2×10)

a. CD-ROM stands for

- (A) Compactable Drive Read Only Memory
- (B) Compact Data Read Only Memory
- (C) Compact Disk Refer Only Memory
- (D) Compact Disk Read Only Memory

b. ALU stands for

- (A) Arithmetic Logic Unit
- (B) Array Logic Unit
- (C) Application Logic Unit
- (D) None of these

c. Which of the following is the first generation of computer?

- (A) EDSAC
- (B) IBM-1401
- (C) CDC-1604
- (D) ICL-2900

d. Second Generation computers were developed during

- (A) 1949-1955
- (B) 1956- 1965
- (C) 1966-1970
- (D) 1970-1990

e. Access time is

- (A) seek time + latency time
- (B) seek time
- (C) seek time – latency time
- (D) latency time

f. What will be output if you compile and execute the following C code?

```
#include<stdio.h>
int main(){
printf("%d",sizeof(5.2));
```


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- c. What is an assembler? How it works? (4)
- Q.4** a. Explain the need for computer communication networks. (4)
- b. Give the differences between LAN and WAN. (4)
- c. How microcomputer is different from mini and mainframe computers? (4)
- d. How does world wide web work? What is IP address? (4)

PART BAnswer any **THREE** questions. Each question carries 16 marks.

- Q.5** a. What are elements of a user-defined function? Write a program in C to find the factorial of a number using function. (8)

- b. Differentiate between Call by value & Call by reference by giving suitable example. (8)

- Q.6** a. Write a program to reverse the entire sequence using array. (8)

- b. Write a program to calculate the number of vowels in a given string. (8)

- Q.7** a. Write a program to print the following outputs using for loops

1		* * * *	
2 2		* * *	
(i) 3 3 3	(ii)	* *	(8)
4 4 4 4		*	
5 5 5 5 5			

- b. Using a suitable example, explain the use of switch statement instead of multiple if-else statements. (8)

- Q.8** a. Define the following: (8)

(i) getch()	(ii) getchar()
(iii) getche()	(iv) fflush()

- b. Discuss different types of operator used in C language along with examples. (8)

- Q.9** a. What is the difference between array_name and & array_name? (4)

- b. Give the difference between the followings: (8)

(i) getw() and putw()
(ii) fprintf and fscanf()

- c. Distinguish between (*m)[5] and *m[5]. (4)