

Time: 3 Hours

**DECEMBER 2012**

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. What format is used to print an integer with the printf function?

- (A) %y (B) %z  
(C) %d (D) % 1C

b. If count =9, the value of group = (++count) + 5 is

- (A) 10 (B) 12  
(C) 11 (D) 15

c. Decimal to Binary conversion of 15 is

- (A) 1010 (B) 1011  
(C) 1111 (D) 1001

d. Mathematical functions are available in which header file in C

- (A) stdio.h (B) stdlib.h  
(C) math.h (D) io.h

e. Which statement is not valid?

- (A) a pointer variable can be assigned the address of another variable  
(B) a pointer variable can be assigned the value of another pointer variable  
(C) a pointer variable can be initialized with null or zero value  
(D) none of the above

f. Identify the correct declaration

- (A) int COUNT[5] [4]; (B) int SUM[10,10];  
(C) int GROUP(10) (10); (D) int Z(10,10);

**Code: DE53/DC53 Subject: COMPUTER FUNDAMENTALS & C PROGRAMMING**

- g. AN INTERPRETER is \_\_\_\_\_
- (A) a combination of computer hardware  
 (B) a program which translates from one high-level language to another  
 (C) a program which translates from one high-level to a machine level line by line  
 (D) None of these
- h. The parameters in a function call are
- (A) Actual parameters (B) formal parameters  
 (C) dummy parameters (D) optional
- i. OCR stands for
- (A) Open Character Reader (B) Optical Character Recognition  
 (C) Output Computer Reader (D) None of these
- j. FTP means
- (A) File Transfer Packet (B) File Transfer Protocol  
 (C) Frequently Transmitted Packet (D) None of these

**PART A**

**Answer any TWO questions. Each question carries 16 marks.**

- Q.2** a. Explain the working of computer with stored program. (8)
- b. Describe the hexadecimal representation of numbers. (8)
- Q.3** a. Discuss computer input units. (4)
- b. Discuss the compiling of high level language program. (6)
- c. Write a note on the layer of UNIX operating system. (6)
- Q.4** a. Define minimum microcomputer configuration in brief. (8)
- b. What is the need of computer communication network? (8)

**PART B**

**Answer any THREE questions. Each question carries 16 marks.**

- Q.5** Discuss:
- (i) Keyword and identifiers  
 (ii) Bitwise operators  
 (iii) Formatted input  
 (iv) Formatted output. (4×4)

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- Q.6** a. Describe the else if ladder with example. (8)  
b. Explain *Do-While* statement with examples. (8)
- Q.7** a. Discuss the initialization of two 'dimensional arrays'. (8)  
b. How can you write the string to the screen? (8)
- Q.8** Discuss:  
(i) No argument but no return value with example.  
(ii) Function that return multiple values. (8+8)
- Q.9** a. Discuss declaration of pointer variable with example. (8)  
b. Describe the following:  
(i) `getc` and `putc` functions  
(ii) `fprintf` and `fscanf` functions (4+4)