

Code : 061101

B.Tech 1st Semester Exam., 2015

FUNDAMENTAL OF INFORMATION
TECHNOLOGY

Time : 3 hours

Full Marks : 70

Instructions :

- (i) The marks are indicated in the right-hand margin.
- (ii) There are **NINE** questions in this paper.
- (iii) Attempt **FIVE** questions in all.
- (iv) Question No. 1 is compulsory.

1. Answer the following as directed (any seven) :

2×7=14

✓(a) What are static RAM and dynamic RAM?

✓(b) What is a search engine?

✓(c) What is Internet?

✓(d) What is a token in C?

✓(e) What is an identifier?

Ⓣ If an array is declared as

arr [] = {1, 3, 5, 7, 9}

then what is the value of size of (arr [3])?

(i) 10 (ii) 20

(iii) 30 (iv) 40

(Choose the correct answer)

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(2)

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(g) A function that uses another function is known as _____. (Fill in the blank)

✓(h) The _____ statement is used to skip statements in a loop.

(Fill in the blank)

✓(i) Ternary operator operates on how many operands?

(i) 1

(ii) 2

(iii) 3

(iv) 4

(Choose the correct answer)

(j) What does a scanf() function return?

✓2/ Write a note on operators available in C language. 14

✓3/ (a) Write a note on data types that C language supports. 9

✓(b) Explain the difference between declaration and definition. 5

✓4/ What are decision control statements? Explain in detail. 14

5. (a) With the help of an example, explain dangling if-else problem. 8

(b) Write a note on GOTO statement. Why should it be avoided? 6

(Continued)

6. (a) Write a function to reverse a string using recursion. 7
- (b) Differentiate between call by value and call by reference using suitable examples. 7
7. (a) Write a program to input an array of 10 numbers and swap the value of the largest and smallest numbers. 7
- (b) Explain how one-dimensional and two-dimensional arrays are initialized. What happens when an array is initialized with—
- (i) fewer initialisers as compared to its size;
 - (ii) more initialisers as compared to its size? 7
8. (a) Discuss the different generations of computers. 7
- (b) What are different types of memory available in a computer? Explain each type briefly. 7
9. (a) Differentiate among programming language, pseudocode and algorithms. 7
- (b) Write a note on mobile communication. 7
