

2017

(1st Semester)

BACHELOR OF COMPUTER APPLICATION

Paper No. : BCA-105

(Programming Language through C)

(PART : A—OBJECTIVE)

(Marks : 25)

The figures in the margin indicate full marks for the questions

SECTION—I

(Marks : 15)

1. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×10=10

(a) Which of the following is not a C token?

(i) Keywords ()

(ii) Expression ()

(iii) String ()

(iv) Int ()

(b) There are _____ ANSI C keywords.

(i) 5 ()

(ii) 30 ()

(iii) 32 ()

(iv) 33 ()

(c) The _____ requires a label in order to identify the place where the branch is to be made.

(i) switch ()

(ii) continue ()

(iii) goto ()

(iv) for ()

(d) The _____ is an entry-controlled loop statement.

(i) while ()

(ii) for ()

(iii) do while ()

(iv) if-else ()

(e) Which of the following is not a user-defined types?

(i) Structures ()

(ii) Arrays ()

(iii) Enumerations ()

(iv) All of the above ()

(f) The default data type of a return value to the calling function is

(i) float ()

(ii) double ()

(iii) int ()

(iv) Both (i) and (ii) ()

(g) If the operator _____ precedes a variable, it returns the address of the variable associated with it.

(i) * ()

(ii) \$ ()

(iii) & ()

(iv) All of the above ()

(h) Pointer has

(i) pointer operators ()

(ii) pointer constants ()

(iii) pointer expression ()

(iv) All of the above ()

(i) The function named _____ reads a character from a file.

(i) fopen() ()

(ii) getc() ()

(iii) putw() ()

(iv) puts() ()

(j) Which of the following is not included in a structure variable declaration?

(i) struct ()

(ii) tag name ()

(iii) identifiers ()

(iv) All of the above ()

2. State whether the following statements are *True (T)* or *False (F)* by putting a Tick (✓) mark : 1×5=5

(a) When prefix ++ or -- is used in an expression, the variable is incremented or decremented after the expression is evaluated.

(T / F)

(b) The 'if' statement is a one-way decision-making statement.

(T / F)

(c) The parameters used in prototypes and function definitions are called actual parameters.

(T / F)

(d) Pointers can be used to return multiple values from a function.

(T / F)

(e) Structure can have elements of different types.

(T / F)

(17)

SECTION—II

(Marks : 10)

3. Answer the following questions :

2×5=10

(a) Differentiate between keywords and identifiers.

(b) What is an infinite loop?

(c) Define function prototype.

(d) What is a pointer?

(e) Differentiate between local and global variables.

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(1st Semester)

BACHELOR OF COMPUTER APPLICATION

Paper No. : BCA-105

(Programming Language through C)

Full Marks : 75

Time : 3 hours

(PART : B—DESCRIPTIVE)

(Marks : 50)

*The figures in the margin indicate full marks
for the questions*

1. (a) Briefly explain the importance of C language. 4
 - (b) Explain the different data types with examples. 6
- Or*
- (c) What is an operator? Write down the operator precedence and their associativity. 6
 - (d) Explain the formatted input/output with appropriate examples. 4

2. (a) Write a simple program to differentiate 'if' and 'if-else' statements. 6
- (b) Mention the relationship between switch statement and break statement with example. 4
- Or
- (c) What is the difference between 'while' and 'do while' loops? 4
- (d) Explain the structure of 'for' loop. Write a C program to find the sum of first 5 natural numbers using 'for' loop. 6
3. (a) What are the elements of user-defined functions? 4
- (b) Differentiate between bubble sort and insertion sort with suitable examples. 6
- Or
- (c) What are the categories of function? Explain. 6
- (d) Define array. How do you declare and initialize an array? 4
4. (a) Mention the difference between the following string functions with examples : 6
- (i) strcpy and strncpy
- (ii) strcat and strncat

(b) Write the benefits of using pointers in C. 4

Or

(c) Write a program using pointers to exchange the values stored in two memory locations. 4

(d) Explain the declaration and initialization of a string variable with examples. 6

5. (a) What is a file? Explain the various operations on file. 6

(b) Differentiate between structures and unions with its syntax. 4

Or

(c) What are the meanings of 'arrays within structures' and 'structure within structures'? 6

(d) How does a user define data type? 4
