

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BVoc DEGREE EXAMINATION DECEMBER 2019
(First Semester)

Branch - NETWORKING & MOBILE APPLICATION

C PROGRAMMING

Time: Three Hours

Maximum: 75 Marks

SECTION-A go Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 =10)

Identify the size of the data type 'double' in terms of bytes.

- (i) 2 (ii) 4
(iii) 8 (iv) 16

Name the derived data type from the following.

- (i) array (ii) char
(iii) float (iv) typedef

Pick out the user-defined data type from the following.

- (i) array (ii) enum
(iii) int (iv) main

What is the output of the statement 3%4?

- (i) 0 (ii) 1
(iii) 3 (iv) 4

Which one of the following is an unconditional branch statement?

- (i) goto (ii) if
(iii) switch (iv) exit

Identify the default return type of main function.

- (i) double (ii) float
(iii) long double (iv) int

In which loop, the body will be executed atleast once?

- (i) do....while (ii) for
(iii) nested for (iv) while

Name the derived data type which stores the list of homogenous elements in a contiguous memory.

- (i) Array (ii) Structure
(iii) Union (iv) Pointers

Which one of the following is used as an alternative to if-else control structure?

- (i) while (ii) ternary operator
(iii) goto (iv) break

10 Which function sends a formatted output to a stream?

- (i) fputc (ii) fgetc .
(iii) fprintf (iv) fread

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5x5 = 25)

11 a Summarise the relational and logical operators in C.

OR

12 a Develop a C program to illustrate the use of Switch case.

OR

b Explain reading and printing character and strings with relevant examples.

13 a State the use of static variables in a function.

OR

b Compare and contrast 'Call by Value' and 'Call by Reference'.

14 a How will you pass pointer to a function? Give an example.

OR

b Develop a Code to perform the following operations in a string 'happy birthday':

(i) Count the number of occurrences of 'a'

(ii) find the length of the string

(iii) extract the substring 'happy'

15 a Outline the usage of command line parameters.

OR

b Bring out the function of bitwise operations.

SECTION -C (40 Marks)

Answer **ALL** questions

f **ALL** questions carry **EQUAL** Marks (5 x 8 = 40)

16 a Enumerate data types in C.

OR

b Explain the following

(i) Symbolic constants (ii) Mathematical functions in C library.

17 a Develop a C code to read and print 20 characters.

OR

b Explain the syntax of exit controlled loop.

18 a Elucidate passing one-dimensional array to a function.

OR '

b Justify the use of Recursive function with a relevant example.

19 a Elucidate structure within structure with student mark details.

OR

b Develop a C code to perform the following string operations in a given string - 'Happy New Year'.

(i) Reverse the given string

(ii) Replace 'p' with 'q'

(iii) count the number of occurrences of a given character

(iv) copy one string to another

(v) find the length of the string

20 a Elucidate binary file creation and its usage.

OR

b Explain the following:

(i) enumerated data type (ii) bit fields.