

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

Branch - COMPUTER APPLICATIONS

PROBLEM SOLVING AND COMPUTER PROGRAMMING USING C

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10x1 = 10)

- 1 Selection sort algorithm sorts an array by repeatedly finding the _____ element.
(i) minimum (ii) maximum
(iii) first (iv) last
- 2 C variable cannot start with
(i) A number (ii) an alphabet
(iii) a character (iv) integer
- 3 i i lie 06 upciaiui ui^piayb
(i) address of the variable (ii) value of the variable
(iii) both (i) a^id (ii) (iv) constant
- 4 A short integer variable occupies _____ memory.
(i) 2 bytes (ii) 4 bytes
(iii) 1 byte (iv) 8 bytes
- 5 The switch () can only test for .
(i) logical (ii) relational
(iii) equality (iv) un equal
- 6 _____ is the entry checking block.
(i) while (ii) do while
(iii) exit (iv) for...loop
- 7 An array is a collection of
(i) different data types (ii) same data types
(iii) both (i) & (ii) (iv) true or false
- 8 By default the function returns .
(i) integer value (ii) float value
(iii) char value (iv) void
- 9 The union holds
(i) one object at a time (ii) multiple objects
(iii) both (i) & (ii) (iv) integer
- 10 _____ function is used to detect the end of file.
(i) feof() (ii) ferror
(iii) fputs() (iv) fgetch()

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

- 11 a Illustrate selection sort algorithm.

OR

12 a List and explain Arithmetic Operators with suitable examples.
OR

b Compare Identifiers and Keywords with necessary examples.

13 a Explain IF statement with example.

OR

b Compare and contrast break and continue statement.

14 a Write a C program using one dimensional array.

OR

b Illustrate array of pointers.

15 a Explain Opening and Closing file.

OR

b Illustrate structures and pointers.

SECTION -C (40 Marks)

Answer ALL questions

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

16 a Outline key points about implementation and efficiency of algorithm.

OR

b Illustrate exchange sort algorithm in detail.

17 a Discuss about different types of constant in C.

OR

b List and explain bitwise operators in C.

18 a Construct a C program using For...Loop statement.

OR

b Summarise key points of storage class.

19 a How can you pass pointers to a function? Explain.

OR

b Demonstrate Multi Dimensional array with example.

20 a Illustrate enumerations with example.

OR

b Compare and contrast structure and union

Z-Z-Z

END