

**BACHELOR OF COMPUTER APPLICATION**  
**FIRST SEMESTER**  
**PROGRAMMING METHODOLOGY**  
**BCA-101**  
[USE OMR SHEET FOR OBJECTIVE PART]

**SET**  
**B**

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

( Objective )

*Choose the correct answer from the following:*

*1 × 20 = 20*

1. A valid structure is:
  - a. One that ends with semicolon(;)
  - b. One that has struct keyword
  - c. One that has members within
  - d. All of the above
2. A pointer holds:
  - a. A value
  - b. Memory address
  - c. Indirect value
  - d. Direct value
3. The valid iterative statement in C execute:
  - a. The block atleast once
  - b. Evaluates test condition
  - c. Increments control variable
  - d. All of the above
4. The do statement is used in:
  - a. for
  - b. while
  - c. do-while
  - d. none
5. Array starts with index:
  - a. 1
  - b. 0
  - c. 1 and 0
  - d. 1 or 0
6. The statement char ch[20] can store how many character?
  - a. 19
  - b. 20
  - c. 21
  - d. 18
7. The index n in array represents (n-1)th element.
  - a. Yes
  - b. No
  - c. May be
  - d. Sometimes
8. Every statement in c ends with:
  - a. }
  - b. ,
  - c. ;
  - d. .
9. A function call has:
  - a. Equal parameters as the declaration
  - b. Less parameters in call than declared
  - c. More parameters than the declaration
  - d. Less parameters only if default values are assigned
10. The invalid function type is:
  - a. Library function
  - b. User-defined function
  - c. Global function
  - d. Default function

11. Which is invalid keyword?  
a. int  
b. sort  
c. while  
d. do
12. Which is an invalid variable declaration?  
a. x\_  
b. \_y  
c. name1  
d. 1\_name
13. Size of int data type in C is:  
a. 2 bytes  
b. 4 byte  
c. 1 byte  
d. 3 byte
14. Size of float data type in C:  
a. 2 byte  
b. 4 byte  
c. 1 byte  
d. 8 byte
15. A homogenous collection of contiguous data is:  
a. Array  
b. Structure  
c. Union  
d. List
16. An invalid decision structure is:  
a. If  
b. If-else  
c. Switch  
d. If-else-else
17. A valid main statement is:  
a. void main()  
b. int main()  
c. Both a and b  
d. None
18. Which of these is not a part of switch structure?  
a. Switch  
b. Case  
c. Break  
d. If
19. Which header file is mandatory to use in a C program?  
a. stdio.h  
b. conio.h  
c. string.h  
d. math.h
20. Which is a valid return type in a int main() block ?  
a. Return 0  
b. Return 1  
c. Return 2  
d. All of the above
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**( Descriptive )**

Time : 2 hr. 30 mins.

Marks : 50

[ Answer question no.1 & any four (4) from the rest ]

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|--|------------|
| 1. What are the valid rules to declare a C variable? Explain with examples.  | 10         |
| 2. What are the different decision statements in C?  | 10         |
| 3. What are different iterative statements in C? What is the difference between while loop and do while loop?  | 7+3=10     |
| 4. What is an array? Explain the use of array when storing a string. Explain what is a null character and its use in determining string length.  | 2+4+4=10   |
| 5. What is a structure? What are the different structure types? Explain the use of dot(.) operator?  | 3+5+2=10   |
| 6. What is a function? What is function declaration, function definitions, and function call? What is return type and how value is returned in a function? What is a function parameter list, what is default parameter? | 2+3+3+2=10 |
| 7. What is a pointer? What are the types of pointer values? With an example C program, show use of pointer in adding two numbers.  | 2+3+5=10   |
| 8. Write a C program to find reverse of a number. Explain the parts of the program in detail.  | 6+4=10     |

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