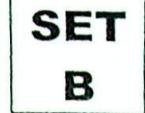


BACHELOR OF COMPUTER APPLICATION  
FIRST SEMESTER  
PROGRAMMING METHODOLOGY  
BCA-101

[USE OMR SHEET FOR OBJECTIVE PART]



Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

(Objective)

*Choose the correct answer from the following:*

$1 \times 20 = 20$

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

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

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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