

E 3149

(Pages : 3)

Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, APRIL 2012

Second Semester

Vocational Course—PROGRAMMING LANGUAGE I—ANSI C

(For the Vocational Subject Computer Applications of Model-II Physics)

Time : Three Hours

Maximum Weight : 25

Part A

Answer all questions from this section.

Each bunch of four questions in this section carries a weight of 1.

I. Fill the blanks with appropriate words :

1. All keywords in C must be written in _____.
2. The conversion specifier _____ is used to print integers in hexadecimal form.
3. The _____ Specification is used to read and write a short integer.
4. The backslash character constant '\n' means _____.

II. Fill the blanks with appropriate words :

5. The operator _____ can't be used with real operands.
6. Arithmetic Operator has higher priority over _____ Operators in ANSI-C.
7. _____ is the Output for the expression $9 - 12 / (3 + 3) * (2 - 1)$.
8. The _____ statement is used to skip a part of the statement in loop.

III. Select the most appropriate :

9. Which data type is not supported by ANSI-C :

- | | |
|--------------------------|-----------------------------|
| (a) Primary data type. | (b) Derived data type. |
| (c) Secondary data type. | (d) User-defined data type. |

10. Choose the correct short hand operator for the statement ' $a = a \% b$ ' :

- | | |
|--------------------|------------------|
| (a) $a \% b$. | (b) $a \% = b$. |
| (c) $b = a \% a$. | (d) $a = \% b$. |

11. Range of un signed character (char) type :

- | | |
|----------------|---------------|
| (a) 0 to 255. | (b) 0 to 254. |
| (c) -255 to 0. | (d) 1 to 255. |

12. Choose the correct expression for the algebraic expression of (ab/c) :

- | | |
|------------------------|----------------------|
| (a) $a \times b - c$. | (b) $a * b/c$. |
| (c) $a/c * b$. | (d) $a \times b/c$. |

Turn over

IV. Select the most appropriate :

13. Which is not 'math' function :

- (a) $\sin(x)$. (b) $\cos(x)$.
(c) $\sec(x)$ (d) \sqrt{x} .

14. Which code is used to print floating point value :

- (a) $\%f$. (b) $\%float$.
(c) $\%F$. (d) $f\%$.

15. Which is not the following are valid identifier :

- (a) record_1. (b) \$tax.
(c) name. (d) file_5.

16. Output for the expression 'for ($n = 1$; $n += 2$; $n < 10$)' :

- (a) 23. (b) 24.
(c) 22. (d) 25.

($4 \times 1 = 4$)

Part B

Answer any **five** questions from this section.

Each question carries a weight of 1.

17. Explain bitwise operator used in C.
18. Explain the general form of Input function used in C-language.
19. How does the *two* dimensional arrays are initialized ?
20. Write the Syntax of 'FOR' loop.
21. What is all the assignment Operators ?
22. Explain 'Jumps' in loops.
23. How the function does is called ?
24. What are all the different types of 'If' statements used in C ? Explain any *one*.

($5 \times 1 = 5$)

Part C

Answer any **four** questions from this section.

Each question carries a weight of 2.

25. Write an interactive program that will read the positive integer and generate the Fibonacci series till that value.
26. Calculate the average of n-numbers, then compute the deviation of each numbers about the average.
27. Write a program to read a positive integer which is 5-digit long and sums the digits in it.

28. Write a program to find the given year is leap year or not.
29. Given a point (x, y) . Write a program to find out if it lies in the First, Second, Third or Fourth Quadrant in $x - y$ plane.
30. Write a C-Program to convert the given temperature in Fahrenheit to Celsius.

(4 × 2 = 8)

Part D

Answer any **two** questions from this section.

Each question carries a weight of 4.

31. What is recursive function ? What its use ? Write a program to explain recursive function.
32. Explain in detail need and elements of 'user defined function' ? Also explain multifunction program.
33. Given are two one dimensional arrays A and B which are sorted in ascending order. Write a program to merge them into a single sorted array 'D' that contains every item from arrays A and B, in ascending order.

(2 × 4 = 8)

Turn over