

S. G.

CS-101/1847(N)

B. Tech. (Semester-I) Examination-2012

Computer Concept & Prog. in C

Time: Three Hours

Maximum Marks: 100

Note: Attempt questions from all the Sections.

Section-A

(Short Answer Type Questions)

Note: Attempt any ten questions. Each question carries 10 marks. (4x10=40)

1. What is an algorithm? Detail with suitable example.

2. What is operating system? Name any two operating systems that are network operating system.

3. What is super computer & mainframe computer?

4. What are different among High level, Assembly level and Machine level languages?

5. Convert following:

- (i) $(1101100)_2 = (6C)_{16}$ $\Rightarrow (154)_{16}$
 (ii) $(4593)_{16} = ()_8$ $\Rightarrow (125023)_8$
 (iii) $(105)_{10} = ()_2$ $\Rightarrow (1101001)_2$
 (iv) $(11110011)_2 = ()_{10}$

Write short notes on structured programming.

Distinguish between keywords and identifiers in brief.

What is data type? Explain the four basic data types in C language.

Explain at least four advantages and disadvantages of using C language?

Differentiate between Logical and logical OR operator.

Explain the role of scan f() function taking suitable example.

12. Write a C program to find the value of y in the following equation:

$$y = x^2 + 3x + 1$$

13. What are bitwise operators? Explain any two bitwise operators.

14. What will be the result of $x = y \% 3$ when $y = 103$.

15. Write note on fifth Generation Computer.

Section-B

(Long Answer Type Questions)

Note: Attempt any three questions. Each question carries 20 marks. $(20 \times 3 = 60)$

1. (a)

What is the function of if -statement? Explain with example.

(b)

Explain the break and continue statement with suitable example.

(c)

Write a program, which accept two integer numbers in main program and passes them to a function. The function calculate cube of both the numbers and their values get printed as main function.

17/07/2020

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Solve any two questions.

(a) Write a program to compute the sum of diagonal elements of a square matrix. 0

(b) Write a structure definition having elements, name, rollno, class, sex, height, weight for 50 students. 0

(c) Write a program to swap the values of two variable making uses of pointers. 0

Solve any two questions-

(a) What is linked list? Describe it in detail.

(b) Write a short note on C preprocessor.

(c) What do you understand by built-in function? How are they different from user defined functions?

CS-101/1847(N)

B. Tech. (Semester-I) Examination-2012

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CS-101/1847
B. Tech. (Semester-I) Exam. -2014
Computer Concepts & Prog. in C

Time: Three Hours
Maximum Marks: 100

Note: Attempt questions from all the sections.

Section-A

(Short Answer Type Questions)

Note: Attempt any ten questions. Each question carries 4 marks. (4x10=40)

1. What is storage media?



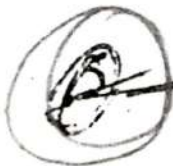
2. Write a C program to add two matrix. (3x3)



3. Explain Union and structure.



4. Define any four string function name with their functions.



5. Explain low level language.



6. What is digital computer?

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Explain arithmetic and logical operator.

Write a C program to check whether a number is even or odd.

Explain operating system.

Write a C program to add first and last digit of a five digit integer number.

Write a C program to check that input number is prime or not.

Explain call by value and call by reference.

What is difference between `i++` and `++i`?

Explain Header file.

What is algorithm and C token?

Section-B

(Long Answer Type Questions)

Note: attempt any three questions. Each question carries 20 marks. (20x3=60)

Write a C program to write factorial value if a given number.

Write a C program to find the sum of first to natural numbers.

What is the difference between the while and do-while loop statement?

Explain the while statement with its syntax, semantics and with an appropriate example.

What is file and its operation and types in details.

Write a program to check entered year is leap year or not.

Write a C program to find the largest of three numbers.

Write a C program to check whether the given integer number is negative or positive.

What is sorting and searching sort a array in ascending order using bubble sort:

23, 12, 56, 43, 89, 28

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B.Tech (Semester-I) Exam.-2016 Computer Concept and Prog. in C++

Time : Three Hours
Maximum Marks : 100

Note : Attempt questions from all sections.

SECTION - A

(Short-answer Type Questions)

Note : Attempt **any ten** questions. Each question carries 4 marks. $4 \times 10 = 40$

1. Explain printf and scanf function.
2. What is diff b/w i++ and ++i?
3. Explain Data Type. (2018, 2015)
4. Write C program to find whether a given number is even or odd. (2015)
5. Write C program to find the factorial of a given number.

[P. T. O.]

6. Define Array and its type. (2018)
7. Explain call by reference.
8. Define ternary operator.
9. Explain Palindrom.
10. Write switch case statement. (2018)
11. Define Malloc and Calloc.
12. Enter a three number from keyboard and write a program find out the greater number.
13. Write diff. Time and Batch operating system.
14. Define Bubble sort with example. (2018)
15. Explain 2nd generation computer. (2018, 2015)

SECTION - B

(Long Answer type questions)

Note : Attempt **any three** questions. Each question carries 20 marks. 3x20=60

1. (a) What are function? What are advantages of using multiple function in a program?

- (b) Explain Memory briefly.
2. Write short note on following -
 - (a) Static variable
 - (b) Pointer
 - (c) getch and putchar
 - (d) Break and Continue
3. (a) Explain sorting and searching technique with suitable example.
(b) Write a program in C enter a number (five digit) from keyboard and sum of its digits.
4. What is operating system and its type and also give its application. (2015)
5. Write difference b/w
 - (a) Computer and Interceptor
 - (b) Keywords and variable
6. (a) Why C language is call free form language.
(b) Define stack and link list.

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CS-1847

B. Tech. (First Semester)

EXAMINATION, 2019

COMPUTER CONCEPT AND PROGRAMMING
IN C++

Time : Three Hours

Maximum Marks : 100

Note : Attempt questions from both Sections as directed.

Section—A

(Short Answer Type Questions)

Note : Attempt any *ten* questions. Each question carries 4 marks.

$10 \times 4 = 40$

- ①. What is an algorithm ?
2. What are the advantages of high level language over machine language ?
- ③. What is an array ? Define an array to store marks of 30 students in 3 subjects.

4. What is recursion ? What are its advantages ?

5. Draw the flowchart to solve a quadratic equation.

6. Write a program in C to multiply two matrices.

7. How do you pass parameter to main() function ?

8. Write short notes on the following :

(a) Passing array as arguments

(b) File handling

9. Write an algorithm as well as flowchart for finding out largest number out of three given number.

10. What is the use of getchar and putchar ?

11. What will be the output of the following C code ?

```
#include <stdio.h >
int main() {
    char arr [11] = "The African queen";
    printf ("%S", arr) }
    return=0
}
```

(C-54)

12. What do you mean by preprocessor directives ? List and explain its different categories.

13. Explain the concept of files records and fields.

14. Write a C language program to enter n elements in array and find second largest number from array.

15. Explain about string handling function in C.

Section—B

(Long Answer Type Questions)

Note : Attempt any *three* questions. Each question carries 20 marks. $3 \times 20 = 60$

1. (a) Write a program in C to check the string is palindrome or not.

(b) Write a C program to create file in binary mode to store the students record.

2. Explain all generation of computers.

3. (a) What do you understand by Top down development and Stepwise refinement ?

(b) Explain the different types of operator.

(C-54) P. T. O.

4. Write short notes on the following :

- (a) Data types
- (b) Structure
- (c) Union
- (d) Pointers

5. (a) Write a C program to input and print test using Dynamic Memory Allocation.

(b) Explain the different types of operating system.

Sachin Bhatnagar 17/01/18

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B.Tech. (Semester-I) Exam.-2017 Computer Concept and Prog. in C++

Time: Three Hours

Maximum Marks: 100

Note: Attempt questions from all the sections.

Section-A

(Short Answer Type Questions)

Note: Attempt any ten questions. Each question carries 4 marks. (10x4=40)

1. What is pointer?
2. Define bubble sort with example.
3. What is Keyword?
4. Explain break and continue.
5. Write a program to check whether a given number even or odd.
6. Define Array with example.

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7. ✓ What is Structure?
8. ✓ WAP to find area of rectangle.
9. What is Computer? Also define its input and output devices.
10. ✓ Write a program to find whether a given year is leap year.
11. ✓ Define memory.
12. WAP to calculate the Gross salary of an employee.
 - (i) His HRA 20% of basic salary.
 - (ii) His DA 40% of basic salary and basic salary input through keyboard.
13. ✓ What are Constant and its type?
14. ✓ Define call by reference.
15. What is difference between character and string?

CS-1847-S-300

Section-B
(Long Answer Type Questions)
Note: Attempt any three questions. Each question carries 20 marks.

1. (a) ✓ Write a program to print Fibonacci series.
(b) Write a program to find length of a given string. (20x3=60)
2. (a) Write a program to check a string is palindrome or not.
(b) ✓ Write a program to Print Alphabet A to Z.
3. ✓ (i) What is pointer?
(ii) Dynamic memory
(iii) Variable
(iv) Ternary operator
4. Explain low level, middle level and high level language.
5. (i) Explain why keyword cannot be used as a variable name?
(ii) Explain why we avoid goto function and write its syntax and give an example using goto keywords?

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6. (i) Write a program to Print all the leap year between 1999 to 2099.
- (ii) Write a program to enter two strings from keyboard and compare they are same or not.

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CS-1847

B. Tech. (First Semester)

EXAMINATION, 2022-23

(1st Year, Common for all Branches)

**COMPUTER CONCEPT AND PROGRAMMING
IN C**

Time : Three Hours

Maximum Marks : 100

Note : Attempt questions from both Sections as directed.

Section—A

(Short Answer Type Questions)

Note : Attempt any *ten* questions. Each question carries 4 marks. $10 \times 4 = 40$

1. Write difference between compiler and interpreter. (BL-2, CO-1, PO-1)

P. T. O.

2. Convert the following : (BL-5, CO-1, PO-1)

(i) $(FA1.2C)_{16} = (?)_8$

(ii) $(574.32)_8 = (?)_2$

3. Write a program in 'C' to print the following pattern : (BL-2, CO-3, PO-1)

1

2 3

4 5 6

7 8 9 10

4. Make the hierarchy of different memories available in a computer. (BL-2, CO-3, PO-1)

5. Write output of the following :

(BL-5, CO-4, PO-1)

`printf("%d", strcmp("QUIET", "QUILT"));`

6. Draw a flow chart for find greatest no. among three numbers. (BL-3, CO-2, PO-1)

7. Differentiate between for loop and a while loop. What are it uses ? (BL-3, CO-2, PO-1)

8. What is the difference between Strings and Arrays ? (BL-3, CO-1, PO-1)

9. Differentiate dynamic memory allocation malloc() and calloc() with example.

(BL-1, CO-1, PO-1)

10. Two numbers are input through the keyboard into two locations C and D. Write a program to interchange the contents of C and D.

(BL-4, CO-1, PO-1)

11. Describe pre-increment and post-increment with example. (BL-4, CO-1, PO-1)

12. Describe a preprocessor. What are the advantages of preprocessor ?

(BL-5, CO-1, PO-1)

13. How would you use the functions fread() and fwrite() ? (BL-4, CO-1, PO-1)

14. Can we specify variable field width in a scanf() format string ? If possible how ?

(BL-5, CO-1, PO-1)

15. Describe about storage allocation and scope of static and register variables.

(BL-2, CO-1, PO-1)

Section—B

(Long Answer Type Questions)

Note : Attempt any *three* questions. Each question carries 20 marks. $3 \times 20 = 60$

1. Define recursive function. Write a program in C to generate Fibonacci series (0 1 1 2 3 5 8 13 ...) using recursive function.

(BL-2, CO-4, PO-1)

2. Write a program in C to add of two square matrix of 3×3 .

(BL-3, CO-3, PO-1)

3. If a five-digit number is input through the keyboard, write a program to print a new number by adding one to each of its digits. For example if the number that is input is 12391 then the output should be displayed as 23402.

(BL-4, CO-2, PO-6)