

B.C.A Semester - 1 (CBCS) Examination**Nov./Dec. -2018 (Old Course)****PROBLEM SOLVING METHODOLOGIS AND PROGRAMMING IN C (CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

- Q-1 (A) Answer the following questions. (04)
- (1) How many keywords are there in C language?
 - (2) Give full Form : ANSI
 - (3) Give difference between ++m and m++ notation.
 - (4) Give definition: Algorithm.
- (B) Answer the following questions. (Any one) (02)
- (1) Give the rules for naming of variable.
 - (2) Draw all the symbols of flow chart with their meaning.
- (C) Answer the following questions. (Any one) (03)
- (1) What is type casting? Explain it with example.
 - (2) Describe data type available in C language.
- (D) Answer the following questions (Any one) (05)
- (1) What is operator? Explain it. Give the list of operators in C language. Explain any two of them.
 - (2) Explain pre-processor in C language.
- Q-2 (A) Answer the following questions. (04)
- (1) Which two loops are known as entry control loop?
 - (2) Ternary operator is also known as _____ operator.
 - (3) Which loop is executed at least one time in any situation?
 - (4) What is the output?
- ```
#include<stdio.h>
#include<conio.h>
void main()
{
 int k=65;
 printf(“%c %d”, k, k);
}
```
- (B) Answer the following questions. (Any one) (02)
- (1) Explain : switch case statement in detail.
  - (2) Explain: break and continue statement with example.
- (C) Answer the following questions. (Any one) (03)
- (1) Describe ladder if else with example.
  - (2) Describe for loop with example.
- (D) Answer the following questions. (Any one) (05)
- (1) Explain “nesting of loops” in details.
  - (2) Write a program to print following output.

```

*
* *
* * *
* * * *
* * * * *
```

- Q-3 (A) Answer the following questions. (04)
- (1) Explain scanf () function.
  - (2) Give difference between getc () and putc ()
  - (3) Explain strlen () function.
  - (4) Mathematical functions are stored in \_\_\_\_\_ header file.
- (B) Answer the following questions. (Any one) (02)
- (1) What is library function? Explain it.
  - (2) Explain getchar () and putchar () functions.
- (C) Answer the following questions (Any one) (03)
- (1) Write a program to enter any string and count that how many characters and how many digits are there in string?
  - (2) What is gmtime () and localtime () functions?
- (D) Answer the following questions. (Any one) (05)
- (1) Explain any five string handling functions.
  - (2) Explain any five mathematical functions.
- Q-4 (A) Answer the following questions. (04)
- (1) '\0' is also known as \_\_\_\_\_
  - (2) In structure, the . (dot) operator is used for what?
  - (3) Define: Union
  - (4) Structure is collection of different data types. Is this true or false?
- (B) Answer the following questions. (Any one) (02)
- (1) How can we initialized and declared structure?
  - (2) Describe the advantages of array.
- (C) Answer the following questions. (Any one) (03)
- (1) Short note: pointer with structure.
  - (2) What is structure? Explain it with example.
- (D) Answer the following questions. (Any one) (05)
- (1) Explain array and all its type with example.
  - (2) Write a program to print all prime numbers between 100 to 200.  
(the number which is divisible by 1 and itself is known as prime number. For example: 7,11,13 etc)
- Q-5 (A) Answer the following questions. (04)
- (1) Define: fopen () function.
  - (2) Give difference between getw () and putw () function.
  - (3) Give difference between fprintf () and fscanf () function.
  - (4) Why we used eof () function?
- (B) Answer the following questions. (Any one) (02)
- (1) What is text file and binary file?
  - (2) Explain file handling in C language.
- (C) Answer the following questions. (Any one) (03)
- (1) Explain advantages and limitations of pointer.
  - (2) Describe: Command Line Argument.
- (D) Answer the following questions. (Any one) (05)
- (1) What is pointer? Explain it with example.
  - (2) Write a program to read from "test.txt" file and print all data on screen, if that file is not available then print proper message.

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