

“प्रश्न-पत्र पर क्रमांक (रोल नम्बर) के अतिरिक्त कुछ भी न लिखें, अन्यथा इसे अनुचित साधनों का प्रयोग माना जायेगा तथा नियमों के अनुसार कार्यवाही की जायेगी।”

“Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules.”

Roll No. 16BCA 1054

B.C.A. (I)
1702

Prog. C

B.C.A. (Part - I)
Examination 2016

Paper - II

BCA-102 : PROGRAMMING WITH C

Time - Three Hours
Maximum Marks - 80

भाग - अ

Part-A

- नोट : (1) प्रश्न संख्या 'एक' अनिवार्य है। शेष प्रश्नों में से किन्हीं चार को हल कीजिये।
- (2) सभी प्रश्नों के अंक समान हैं।

BCA/1702/1300

(1)

(Contd.)

Note: (1) Question No. 1 is compulsory. Attempt any FOUR questions from the remaining questions.
(2) All questions carry equal marks.

1. Explain in brief the following :-

- What are Key Words ?
- What are Rules for making flow chart ?
- Explain the concept of preprocessor.
- Explain Recursion ?
- Explain Decision Tables.
- Flow Chart & algorithm
- Precedence & Associativity of operator.
- Initialization of array. 2x8=16

2. (a) Explain the working of :- 4x2=8

- For Statement
- Switch Statement

(b) Write a program to find prime numbers from 1 to 100. 8

3. (a) Discuss :-

- Variable,
- Constant
- Symbolic Constant

(d) Unary and binary arithmetic operators. 2x4=8

(b) Write a C program for the following output : 8
1 1 2 3 5 8 13 21

4. (a) What do you understand by data types ? Explain scope rule of a variable. 8

(b) Write a c program to check whether number is even or odd. 8

5. What is recursive function ? Write advantages and disadvantages of recursive function. Also write C program to find factorial of N number. 16

6. (a) What is pointer ? What are the uses of pointer ? How Pointer variable is different from variable. 8

(b) What is a structure ? How is it different from union? Explain with suitable example. 8

7. (a) What are Library and user defined functions? Describe different types of user defined functions. 8

(b) Write a C Program to add two matrices and store result into third matrix. 8

8. (a) What is the use of f open() function ? Explain in detail. 5

(b) Explain f read() and f write() function in detail. 5

(c) Write short notes on :
(i) PSeudo Code
(ii) Flow Chart and algorithms. 3×2=6

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B.C.A. (I)

1702

Prog.C

B.C.A. (Part-I) Examination 2017

Paper - II

BCA 102: Programming with C

Time - Three Hours

Maximum Marks - 80

नोट :- (1) प्रश्न संख्या एक अनिवार्य है। शेष प्रश्नों में से किन्ही चार को हल कीजिए।

Note:- (1) Question No. 1 is Compulsory. Attempt any four questions from the remaining questions.

नोट :- (2) सभी प्रश्नों के अंक समान हैं।

(2) All questions carry equal marks.

1702/BCA/1300

(01)

- 1-(a) What is the use of gets and puts?
- (b) Give any two differences between structures & union?
- (c) What are enumerated data types? Give an example.
- (d) What are the advantage of high level languages over machine language?
- (e) Differentiate between Logical Error and run time error?
- (f) What are Pre processor directives?
- (g) List any five Date and time Function?
- (h) Define an array to store marks of 30 students in 3 subjects? $(8 \times 2 = 16)$
- 2-(a) What is Pseudo Code? How it is used as a problem-solving tool. 4
- (b) Explain the use of break and continue statement in loops with example? 6
- (c) What is an operator? Explain the Airthmetic, Relational, Logical operators in C Language. 6

- 3-(a) Explain any five string manipulation Library Function with examples.
- (b) Design and develop a C program to read a year as an input and Find whether it is leap year or not. Also consider end of the centuries? $8+8=16$
- 4-(a) What is dynamic memory allocation? Write and explain the different dynamic memory allocation function in C.
- (b) What is a file? Explain how the file open and file close function with example. $8+8=16$
- 5-(a) Explain the different kinds of loops available in C with examples?
- (b) Write a program for Towers of Hanoi problem using recursion? $8+8=16$
- 6-(a) Explain array of structures and structure within a structure with example?
- (b) Write a C Program to swap two numbers using call by Pointers method? $8+8=16$

7-(a) Write a C Program to reverse of an integer number NUM and check whether it is PALINDROME or NOT?

(b) Explain the working of :-

(i) Nested if-else

(ii) pointer to pointer

$$8+8=16$$

8-(a) What are Primitive and non-primitive data types? 5

(b) Explain the array of pointers with example? 5

(c) Write a program in C to print the numbers from 4 to 9 and their squares? 6