

This question paper contains 4+1 printed pages]

BCA-103

B.C.A. (I Year) EXAMINATION, 2018

Paper III

(Problem Solving Through C Programming)

Time allowed : Three Hours

Maximum Marks : 100

Part A (खण्ड 'अ') [Marks : 20]

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं । प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

Part B (खण्ड 'ब') [Marks : 50]

Answer five questions (250 words each), selecting one question from each Unit.

All questions carry equal marks.

प्रत्येक इकाई से एक प्रश्न चुनते हुए कुल पाँच प्रश्न कीजिए। प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं ।

Part C (खण्ड 'स') [Marks : 30]

Answer any two questions (300 words each).

All questions carry equal marks.

कोई दो प्रश्न कीजिए । प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

P.T.O.

Part A

1. (i) Define Logic error.
- (ii) What is meant by algorithm ?
- (iii) What is meant by fundamental data types ?
- (iv) What is the use of bitwise operator ?
- (v) Define simple If statement.
- (vi) What is the use of continue statement ?
- (vii) Define scope of a variable.
- (viii) Differentiate between local and global variable.
- (ix) Define purpose of static variable
- (x) Give the syntax of open and close file operation. 10×2=20

Part B

Unit-I

2. What is meant by program design ? Explain various types of Errors. 10

Or

- (a) Draw a flowchart to find the largest integer number among three.
- (b) What are the properties of an algorithm ? 5+5

Unit-II

3. Write a note on basics of C-language. 10

Or

Write short notes on :

- (i) Hierarchy of operators and operations.
- (ii) Creation and evaluation of expressions. 5+5

Unit-III

4. Explain switch statement with example. 10

Or

- (a) Differentiate between while and do-while control structure.
- (b) Write a C program to print an integer number in reverse order and also display its sum of digits.5+5

Unit-IV

5. What is a Function ? Write a C program using function to calculate the transpose of a $M \times N$ matrix. 10

Or

What is meant by Recursion ? Write a C program to calculate the factorial of an integer number.

Unit-V

6. Write a C program using pointers to find the maximum among N integer number of an array. 10

Or

- (a) Explain various types of variables with examples.
(b) Write a note on File Input/Output operations. 5+5

Part C

Unit-I

7. What is Flowchart ? Discuss various symbols with examples. 15

Unit-II

8. Discuss various types of operators. 15

Unit-III

9. (a) Explain For control structure with example.
(b) Write a note on break and goto statement. 10+5

Unit-IV

10. Write short notes on :
- (i) Categories of Function
 - (ii) Call by value and call by reference
 - (iii) Function Prototype, 8+3+4

Unit-V

11. (a) Explain structure with example.
(b) Write a C program to multiply two matrices. 5+10

