

2015

Time : 3 hours

Full Marks : 100

Pass Marks : 40

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

*Answer any **five** questions.*

1. Explain programming technique and tools.
2. Draw a flowchart to accept 10 numbers as input then display only even numbers from the given numbers if any.
3. Write an Algorithm that generates the Factorial for a given number.
4. Define the terms on the following :
 - (a) Time complexity
 - (b) Array

ZV – 3/1

(Turn over)

- (c) Algorithm
- (d) Data type
- 5. Explain the purpose of Expression, Statement and Loop in a program.
- 6. Describe built-in functions and user define functions.
- 7. Draw a flowchart to calculate largest numbers from 10 given numbers.
- 8. Draw flow chart and write algorithm to accept data and calculate simple interest.
- 9. Explain procedural programming and recursive programming.
- 10. Write short notes on any **two** of the following :
 - (i) Matrices
 - (ii) Space complexity
 - (iii) Multi branching
 - (iv) Selection branching



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VKV(1) — BCA (3)

2016

Time : 3 hours

Full Marks : 100

Pass Marks : 40

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

*Answer any **five** questions.*

1. Describe the advantages and disadvantages of procedural programming.
2. Draw a flowchart to accept any three numbers from the keyboard and display only smallest of the three.
3. Write an Algorithm that generates the odd numbers between 51 to 151.

RZ-3/1

(Turn over)

4. Define any **two** of the following :
- (i) Performance Analysis
 - (ii) Pseudocode
 - (iii) Flow Chart
 - (iv) Variable and Constant
5. What is Subroutine and Branching ?
6. Explain time complexity.
7. Draw a flow chart to Sort a list of given numbers in descending order.
8. Explain Complexity of Algorithm.
9. Differentiate between Procedural Programming and Object Oriented Programming.
10. Write short notes on any **two** of the following :
- (i) Big 'O' notation
 - (ii) File handling
 - (iii) Iteration
 - (iv) Decision Table

RZ - 3/1 (600)

(2)

VKV(1) — BCA (3)

2017

Time : 3 hours

Full Marks : 100

Pass Marks : 40

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five questions.

1. What is an algorithm ? What are the properties of an algorithm ? What are the steps involved in algorithm development ?
2. What is flowchart ? What are the advantages of flowchart ? Explain different types of symbols used in flowchart.
3. What is Pseudocode ? What are the advantages of pseudocode ? Write a pseudocode to perform the basic arithmetic operations.

4. (a) Draw a flowchart to find out the biggest of the three given positive numbers.
- (b) Write an algorithm to find the factorial of a given positive number.
5. What do you mean by complexity of an algorithm? Explain complexity measures of the efficiency of an algorithm.
6. What do you mean by Asymptotic? Explain all.
7. What is an array? How many types of arrays are there? Explain with example.
8. Explain the different characteristics of top-down and bottom-up approach.
9. Define iteration. Explain different types of iteration statements with example.
10. Write short notes on the following :
- (a) Binomial Coefficients
 - (b) Control Structure
 - (c) Recursive Programming



VE - 3/2 (700)

(2)

VKV(1) — BCA (3)