



Total No. of Questions: 4/18

Total No. of Pages: 2

First Year BBA(CA)
BBA11404: Principles of Programming And Algorithm
(Semester I)

Program: BBA (Computer Application)
Program Specific: BBACA07
Course Type: Major (VSC)
Paper: IV

Credits: 2
Time: 2 Hours
Max. Marks: 30
SET: A

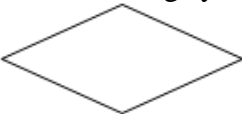
Instructions to the candidate:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Draw a well labelled diagram wherever necessary.

SECTION: A

Q1) Answer the following.

[5 X 1= 5M]

- 1) An algorithm is a _____ that provides a series of instructions that should be carried out in a particular order to get the desired outcome.
a) Step – by – step process b) flow chart process
c) Pseudocode process d) Structured process
- 2) The following symbol denotes?

a) Decision b) Initiation c) Initialization d) I/O
- 3) A flowchart is a _____ representation of an algorithm using various symbols, shapes, and arrows to explain a process or program.
a) Graphical b) Visual c) both a and b d) only visual
- 4) Which of the following is not the type of sorting?
a) Bubble Sort b) Insertion Sort c) Flowchart Sort d) Merge Sort
- 5) Write the 1's complement of given number $(111001110)_2$
a) (000110001) b) (111111100) c) (000011111) d) (000011110)

SECTION: B

Q2) Answer the following .(any 5)

[5 X 1 =5M]

- 1) What is sorting?
- 2) Enlist the characteristics of algorithm.
- 3) Find 1's complement of (111001110) .
- 4) Draw which symbol is used in flowchart for input?
- 5) Write an algorithm to input number on screen.
- 6) Convert given number octal to binary $(246)_8 = (?)_2$
- 7) Enlist the number system conversion types.

SECTION: C

Q3) Answer the following. (any 4)

[4 X 4 = 16M]

- 1) Write the advantages of algorithm.
- 2) What is insertion sort? Explain with example.
- 3) Find the 2's complement of $(111000111)_2$
- 4) Solve the given example using bubble sort: [10,15,4,3,7]
- 5) Write flowchart symbols with its name, symbol, meaning.
- 6) Convert the following Hexadecimal to binary number system
 - i) $(5AD)_{16} = (?)_2$
 - ii) $(2C6)_{16} = (?)_2$.
- 7) Write the difference between flowchart and algorithm.

SECTION: D

Q4) Answer the following.(any 1)

[4 X 1 = 4M]

- 1) Draw a flowchart for to find a maximum of two numbers.
- 2) Write an algorithm to identify given number is positive or negative.
