

B.C.A. - I (CBCS Pattern) Sem-I
UBCAT104 - Paper-IV : Programming Tools and Techniques

P. Pages : 1

Time : Three Hours



GUG/W/22/11746

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagrams wherever necessary.
 3. Avoid vague answers and write answers relevant and specific to questions only.

Either:

1. a) What is Translator? Differentiate between compiler and interpreter. 8
- b) Write the characteristics of good programming languages. 8

OR

- c) Explain Linker and Loader in details. 8
- d) Explain various types of programming languages. 8

Either:

2. a) Explain different symbols used to draw flowchart. Also state rules for drawing flowchart. 8
- b) What is Problem analysis? Explain Input, Processing, Output. 8

OR

- c) Explain conceptual development of the solution for given problem. 8
- d) Write a note on: 8
 - i) Brute force
 - ii) Divide and Conquer.

Either:

3. a) Write an algorithm for adding three numbers also draw flowchart for same problem. 8
- b) Explain for and while looping control statements with example. 8

OR

- c) What is Data type? What is role of data type in programming language? Explain. 8
- d) Write an algorithm and draw a flowchart to calculate factorial of given number. 8

Either:

4. a) Write an algorithm for transpose of matrix. 8
- b) What is sorting? Explain any one sorting method. 8

OR

- c) What is one dimensional array? Explain 8
- d) Write an algorithm to perform matrix addition. 8

5. Attempt all the questions.
 - a) Explain about Assembler. 4
 - b) State advantages and disadvantages algorithm. 4
 - c) Explain Continue and Break statements. 4
 - d) What is searching? Explain. 4
