

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

P. Pages : 2

Time : Three Hours



**GUG/W/24/11746**

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram use supporting data wherever necessary.
  3. Avoid vague answers and write specific answers related to questions.

**Either:**

1. a) Explain Assembly languages and high level languages. 8
- b) Differentiate between compiler and interpreter. 8

**OR**

- c) Draw a diagram and explain compilation process. 8
- d) Write a note on- 8
  - i) Procedure - Oriented Programming languages.
  - ii) Scripting languages.

**Either:**

2. a) Write an algorithm and draw a flowchart to calculate area of a circle. 8
- b) Define algorithm explain any two types of algorithm. 8

**OR**

- c) Write and explain steps of problem analysis and program development. 8
- d) Describe advantages and disadvantages of flowchart. 8

**Either:**

3. a) Write a note on: 8
  - i) Operator
  - ii) Keywords

- b) Explain the following loop construct with example. 8
- i) For
- ii) While

**OR**

- c) Write an algorithm and draw a flowchart to check whether number is even or odd. 8
- d) What is variable? Write the rules for naming a variable. 8

**Either:**

4. a) Differentiate between sequential and Binary search. 8
- b) Write an algorithm to delete the element in a list. 8

**OR**

- c) Define sorting explain Bubble sort using example. 8
- d) Explain two dimensional array with example. 8

5. Solve all the questions.
- a) Write a note on Linker. 4
- b) Explain pseudocodes development tool in brief. 4
- c) Explain break statement with example. 4
- d) Describe merging techniques using example. 4

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