

B.Sc. - I (Information Technology) (CBCS Pattern) Semester-I
UBITT104 - Paper-IV - Developing Programming Logic and Techniques

P. Pages : 2

Time : Three Hours



GUG/W/24/10913

Max. Marks : 80

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

Either:

1. a) What are characteristics of a Good Programming Language? 8
- b) Explain the following 8
 - i) Compiler
 - ii) Interpreter

OR

- c) Describe the object oriented and function oriented language in detail. 8
- d) Explain the various Generation of Language. 8

Either:

2. a) Explain the concept of problem Analysis and process analysis in detail. 8
- b) Explain the different types of algorithm in detail. 8

OR

- c) Describe the advantages and disadvantages of a flow chart. 8
- d) Define the characteristics of pseudo code in detail. 8

Either:

3. a) Write a detail note on variable and constant with syntax and example. 8
- b) Write an algorithm to check input number is even or odd. 8

OR

- c) Explain the different types of operator with examples. 8
- d) Explain the Nested if via syntax and algorithm by demonstrating sample example. 8

Either:

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| 4. | a) | What do you mean by an Array? Explain the types of Array in detail. | 8 |
| | b) | Write an algorithm to describe bubble sort using array. | 8 |

OR

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|-----------|----|---|----------|
| | c) | What is modular programming? Explain in detail. | 8 |
| | d) | Define the memory representation of a two dimensional Array. | 8 |
| 5. | | Solve all the questions. | |
| | a) | Write a short note on linker and loader. | 4 |
| | b) | Describe the Big 'O' notation. | 4 |
| | c) | Explain the role of data types in short. | 4 |
| | d) | Explain the simple memory representation of an one dimensional Array. | 4 |
