

B.C.A.- I (NEP) Semester-I
SEC101 - Paper-III - Problem Solving Techniques

P. Pages : 2

Time : Three Hours



GUG/S/25/16189

Max. Marks : 60

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

Either:

1. a) Explain the machine language in detail. 6
- b) Describe the procedure for competition. 6

OR

- c) Explain the following. 6
 - i) Assembler
 - ii) Interpreter
- d) Explain the characteristics of good languages. 6

Either:

2. a) Explain the conceptual development of the solution for a given problem. 6
- b) Define Algorithm and explain the characteristics of good algorithm using suitable example. 6

OR

- c) What are flowchart? Explain the concept of flowchart and symbols for flowchart using suitable example. 6
- d) Explain the advantages and disadvantages of flowchart. 6

Either:

3. a) Define variable. Explain the rules for defining variable using suitable example. 6
- b) Explain the different types of operator use in language in brief. 6

OR

- c) Define looping and explain while loop using suitable example. 6
- d) Explain the following. 6
 - i) Break
 - ii) Continue

Either:

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|-----------|----|---|----------|
| 4. | a) | Define Array. Explain the various operation on the array. | 6 |
| | b) | Define sorting and explain the procedure of Bubble sorting. | 6 |

OR

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|-----------|----|--|----------|
| | c) | Explain the concept of Merging in detail. | 6 |
| | d) | Write the difference between sequential and Binary search. | 6 |
| 5. | | Attempt all the questions below. | |
| | a) | Explain the concept of 'Generation of languages' in brief. | 3 |
| | b) | Explain the Pseudocode in detail. | 3 |
| | c) | Define Tokens. List the various tokens in brief. | 3 |
| | d) | Explain the one-dimensional array in brief using suitable example. | 3 |
