

B.Sc. (I.T.) - I (CBCS)-Regular-Semester 2017 Sem I
UBITT104 - Paper-IV : Developing Programming Logic and Techniques

P. Pages : 1

Time : Three Hours



GUG/S/18/10071

Max. Marks : 80

- 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 answers and write specific points/answer related to question.

1. a) Write a note on: 8
i) Machine language ii) Assembly language
iii) High level language iv) Fourth generation language.
b) What are translators? Explain different types of translators. 8
- OR**
- c) Explain different stages of compilation process. 8
d) Why it is important to know the characteristics of programming language before showing a problem? 8
2. a) What is PDLC? Explain different stages of PDLC. 8
b) Write an algorithm and draw a flowchart to swap two number. 8
- OR**
- c) What is Big O-Notation? Explain with example. 8
d) What is flowchart? Explain advantages & disadvantages of flowchart. 8
- Either
3. a) Write an algorithm & draw a flowchart to find reverse and sum of digits multidigit numbers. 8
b) Explain Relational and logical operators used in high level language with example. 8
- OR**
- c) What is difference between if-else and switch statements. Explain with suitable example. 8
d) Write an algorithm and draw a flowchart to check whether inputted number is even or odd. 8
- Either
4. a) What is the need for an array? Explain the types of arrays? 8
b) Define sorting. Write an algorithm for bubble sort. 8
- OR**
- c) What is searching? Write the difference between sequential and Binary search. 8
d) Write a algorithm to add two 2-dimensional arrays. 8
5. Solve all the question.
- a) Write note on: 4
i) Linker ii) Loader
b) Write a short note on problem analysis. 4
c) Explain character set. 4
d) Describe the concept of merging. 4
