1057
B.A./B.Sc.(General)-2nd Semester
Computer Science
A02: Computer Fundamentals and C Programming *(Old)*

Time allowed: 3 Hours   Max. Marks: 65

NOTE: *Attempt* <u>*five*</u> *questions in all, including Question No. IX (Unit-V) which is compulsory and selecting* <u>*one*</u> *question from each Unit.*

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UNIT – I

I.   (a) Explain the historical journey of computer along with its applications.   (7)
     (b) Draw difference among Assembler, Compiler and Interpreter.   (6)

II. (a) Classify the computers based on their size along with their processing power.   (6)
     (b) Write about "Word Processing" and "Multi-lingual Applications" in detail.(7)

UNIT – II

III. (a) What is operating system? Explain its various types.   (2+5)
     (b) Draw difference between LAN and WAN.   (3+3)

IV. (a) Explain various functions of operating system along with example.   (7)
     (b) What is Network? Explain various services offered by Internet.   (2+4)

UNIT – III

V.   (a) Draw difference between Algorithm and flow-chart.   (3+3)
     (b) Explain any three control structures with examples.   (7)

VI. (a) How do you do problem solving and analysis? Explain.   (7)
     (b) How expressions are solved using rules of Hierarchy? Explain in detail.   (6)

UNIT – IV

VII. (a) Define function. Explain how parameters are passed to it through C code.   (2+5)
     (b) How strings are handled in C? Explain any three operations.   (2+2+2)

VIII. (a) What is the difference between call-by-value and call-by-reference? Explain.   (3+3)
      (b) What is array? Explain any C-program to access multidimensional arrays.   (2+5)

UNIT – V

IX. Explain the following: -
     (a) Pointers
     (b) Structures
     (c) Unions
     (d) Break and continue statements
     (e) Pseudo code
     (f) Client server systems   (2+2+2+2+2+3)

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