BTS–II(R&S)/ I(S)–05.17.0637 Reg. No. | | | | | | | | |

B

B.Tech. Degree II Semester Regular and Supplementary/ I Semester Supplementary Examination May 2017

CE/EE/ME/SE GE 15-1201 A & CS/EC/IT GE 15-1101 B
COMPUTER PROGRAMMING
(*2015 Scheme*)

Time: 3 Hours Maximum Marks: 60

PART A

(Answer ***ALL*** questions)

(10 × 2 = 20)

I. (a) What are the categories of software?
(b) Explain the functions of a compiler, loader and linker.
(c) Briefly explain the precedence of operators in C.
(d) What is Automatic type conversion?
(e) Find the value of Monday and Wednesday in the following statement.
enum month{January, February = 2, April = 0, May}. Give the explanation of your answer.
(f) Write a program to evaluate $x^3 + 2x + 1$
(g) Write a program to check whether a given string is a palindrome or not.
(h) Explain the control statements in C language.
(i) Explain any two functions for performing dynamic memory allocation.
(j) Briefly describe the file handling functions.

PART B

(4 × 10 = 40)

II. Explain the basic units and working of a digital computer system. What are the different types of memory? (10)

OR

III. What is a flowchart? Explain the role of flowchart in program design with the help of an example. (10)

IV. Write a program to generate Fibonacci series between 1 and 100 and also find its sum. (10)

OR

V. (a) Write a program to generate a series given below for 'n' rows. (5)

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1
1   2
1   2   3
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(b) Write a program to check whether a given number is an Armstrong number or not. (5)

(P.T.O.)

VI. What is binary search? Write a program to sort a set of numbers and implement binary search. (10)

OR

VII. (a) What is recursion? Give an example. (5)

(b) Write a program to add two 2D matrices. (5)

VIII. Write a program to find the transpose of a matrix using pointer check whether matrix is symmetric or not. (10)

OR

IX. (a) Explain command line arguments with an example. (5)

(b) Write a program to count number of characters in a file. (5)

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