BTS-I&II-05.15-0479 Reg.No. | | | | | | | | |

A

B.Tech. Degree I & II Semester (Combined) Examination
May 2015

IT/CS/EC/CE/EE/ME/SE/EB/EI/FT 1108 COMPUTER PROGRAMMING

(*2012 scheme*)

Time : 3 Hours Maximum Marks : 100

PART A
(Answer *ALL* questions)

(8 × 5 = 40)

I. (a) What are the applications of computers?
(b) Write the algorithm for checking whether a number is prime or not.
(c) Explain the terms (i) compiler (ii) interpreter
(d) Write a program to calculate the average of a set of N numbers.
(e) What are library functions? Explain with an example.
(f) Distinguish between BREAK and CONTINUE with an example.
(g) What is meant by enumerated data types? Give its application also.
(h) What is a dynamic array? How is it created?

PART B

(4 × 15 = 60)

II. (a) Distinguish between hardware and software of a computer system. (8)
(b) Explain the different categories of software. (7)

OR

III. (a) Explain programming process. (8)
(b) Explain the working of a digital computer. (7)

IV. (a) Explain the types and generation of programming languages. (10)
(b) What is the function of Linker and Loader? (5)

OR

V. (a) Write an algorithm and program to compute simple interest where the principal, number of years and rate of interest are given. (7)
(b) Write a single program to compute the area of the following figures: (8)
(i) Circle (ii) Rectangle (iii) Triangle (iv) Square

VI. (a) Write an algorithm and a C program to print the Fibonacci series upto 100. (10)
(b) Describe two ways of passing parameters to function with examples. (5)

OR

VII. Write a program to read two strings from keyboard and concatenate them without using a built-in-function. (15)

VIII. Write a C program to read and store register number, name, mark of physics, chemistry and mathematics of a set of 100 students using structure. Display the progress card of each student which contains register number, name, total mark, percentage and grade of each student (91% - 100%A grade, 80% - 90% B grade and below 80 – C grade). (15)

OR

IX. (a) What are the advantages of using pointers? (5)
(b) Write a program to write N numbers to a file. (10)

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