BTS–I–11.19–1445 Reg. No. [redacted]

C

B.Tech. Degree I Semester Examination November 2019

CE/EE/ME/SE 19-200-0101 A COMPUTER PROGRAMMING

(*2019 Scheme*)

Time: 3 Hours Maximum Marks: 60

PART A

(Answer *ALL* questions) (8 × 3 = 24)

I. (a) Differentiate between application software and system software.
(b) Which are the different types of programming languages?
(c) What is an identifier? What are the rules for naming an identifier?
(d) Differentiate between break and continue statements in c.
(e) Give any six string manipulation functions in c with their use.
(f) What will be the values of mon, tues, thurs, fri sun?
enum days{mon=?,tues=?,wed=4,thurs=?,fri=?,sat=8,sun=?};
(g) Write a program to find the sum of two integers passed from command line during execution time.
(h) What is a file pointer? Which are the steps involved in accessing a file?

PART B

(4 × 12 = 48)

II. (a) Explain the various design tools used for writing a program. (6)
(b) With a neat block diagram explain the working of a digital computer. (6)

OR

III. (a) Write the algorithm and draw the flow chart for finding the largest of three numbers. (6)
(b) Explain the various steps involved in problem solving methodology. (6)

IV. (a) Write a program using switch case to print the vowels inside a string. (6)
(b) Which are the various selection statements used in c? Explain with suitable examples. (6)

OR

V. (a) Write a program to check whether a given number is Krishanamoorthy number or not (hint 1!+4!+5!=145). Use while loop. (6)
(b) Write a program to print pascals trinagle in given number of rows using for loop. (6)

VI. (a) Explain call by value and call by reference mechanism with suitable examples. (6)
(b) Write a program to check whether a given string is palindrome or not without using string manipulation functions. (6)

OR

VII. (a) Write a program using structure to display details (empid,name,designation,salary) of an employee in ascending order of their salary. Use bubble sort. (8)
(b) Write a program to print fibonacci series using recursion. (4)

VIII. (a) Explain dynamic memory allocation in c in detail. (4)
(b) Write a program to perform matrix addition .Use pointers to declare array. (8)

OR

IX. (a) Write a program to check whether two files are identical or not. (6)
(b) Differentiate array of pointers and pointer to an array with suitables examples. (6)

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