

**1E2406****1E2406**

**B.Tech. I semester (Main) Examination, Dec-2018**  
**ESC**  
**1FY3-06 Programming for Problem Solving**

Time : 2 Hours

Maximum Marks : 80

**Instructions to Candidates:**

*Attempt all five questions from Part A, four questions out of six from Part B and two out of three from Part C. (Schematic diagrams must be shown wherever necessary). Any data you feel missing suitable be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.*

**Part - A**

(Short answer questions up to 25 words ). All questions are **compulsory**.

(5×2=10)

- 1 ✓ Write the difference between High - Level language and Low - Level language. (2)
- Half 2. Write the various elements of C language (C-Tokens). <http://www.rtuonline.com> (2)
- 3 ✓ Write the syntax of switch - case statement in C language. (2)
- Half 4. Write the difference between assignment operator and equality operator. (2)
- 5 ✓ What is an array. Write the syntax of an array declaration in C language. (2)

**Part - B**

(Analytical/Problems Solving Questions). Attempt any four question. (4×10=40)

1. What do you mean by identifiers? Write the rules for identifier declaration in C. (10)
- 2 ✓ Write a program in C language to determine the youngest of three boys i.e. shyam, ajay and mohan, if their ages are input through the keyboard. (10)
- 3 ✓ Write a program to print the table of any given input number N. (10)
4. Define a pointer. Write a program to swap two integer variables using pointer. (10)

5/ Perform the following :-

(5×2=10)

- a)  $(1101.101)_2 = (?)_{10}$
- b)  $(743.91)_{10} = (?)_8$
- c)  $(A1B2.6C)_{16} = (?)_{10}$
- d)  $(10111010)_2 + (10101)_2 = (?)_2$
- e)  $(1011011)_2 - (110101)_2 = (?)_2$

6/ Write the programmes to print following patterns using loop :

(2×5=10)

a) ✓ \*  
\* \*  
\* \* \*  
\* \* \* \*

b) 1  
✗ 0 1  
1 0 1  
0 1 0 1

### Part - C

(Descriptive/Analytical/Problem Solving/Design Question). Attempt any two question.

(2×15=30)

1. Discuss the difference between call by value and call by reference parameter passing technique with suitable examples. <http://www.rtuonline.com> (15)
2. Explain the concept of file handling in C Language. Write a program to copy the data from source file to destination file. (15)
3. Discuss the uses of structure and pointer to structure with suitable examples. (15)