A (Printed Pages 3)

(20222) Roll No. ....

B.Sc. (Com.Sc.)-V Sem.

NP-3609 (CV-III)

B.Sc. (Computer Science)

Examination, Dec. 2021

(System Software)

(BCS-502)

Time : 1½ Hours] [Maximum Marks : 75

Note : Attempt **all** the sections as per instructions.

Section-A

Note : Attempt any **two** questions. Each question carries 7.5 marks. $2 \times 7.5 = 15$

1. Describe, fields of symbol table.

2. Differentiate between Assembler and Interpreter.

3. What is a macro?

4. Differentiate between a macro and a subroutine.

5. What is the need of optimization in compiler design?

Section-B

Note : Attempt any **one** question. Each question carries **15** marks. $1 \times 15 = 15$

1. Write a note on macro expansion with its algorithm.

2. What do you mean by **tokens in compiler design?** How can they be **recognized?**

3. Explain different aspects of compilation in brief.

Section-C

Note : Attempt any **two** questions. Each question carries **22.5** marks.

$2 \times 22.5 = 45$

1. Explain linking loader in detail.

NP-3609 (CV-III)/2

2. Define control section. How does control section differ from the program blocks? Explain with an example.

3. Write short notes on the following:

   (a) Memory allocation

   (b) Code generation

   (c) LEX.

4. Why we used compiler? Define the various phases of compiler along its neat diagram.

5. Explain the different machine independent loader features in detail.