

K-26/2/10  
 Total No. of sheet used :  Total No. of Questions  7633/N  
 Subject : System Software  
 Class :  5<sup>th</sup> Semester  
 Paper : BCA-313  
 Title of Paper : System Software  
 Time Allowed : 3 Hours  
 Maximum Marks: 75 MinPass Marks: 35%

Note: Candidates are required to attempt five questions in all selecting at least two questions each from sections A and B. Section C is compulsory.

**SECTION A**

- Q1. What do you mean by system Software? How it is different from application software? Discuss various types of system software. 15
- Q2. Differentiate between machine level language and assembly level language. Discuss the salient feature of assembly level language. 15
- Q3. Discuss in detail the design of a one-pass assembler. 15
- Q4. Define loaders. What functions do loaders perform? Discuss in detail the design of absolute loader? 15

**SECTION B**

- Q5. Draw a block diagram of a compiler? Explain the different stages of compilation procedure in detail. 15
- Q6. What do you mean by parsing? What are various types of parsing? Discuss any one type of parsing in detail. 15
- Q7. Discuss the following type of code optimization in detail  
 a) Elimination of common sub expression 7.5  
 b) Dead code elimination 7.5
- Q8. Elaborate various software tools for program development. 15

**SECTION C**

- Q9. a) What are various language processing activities? 03  
 b) What are the merits and demerits of two pass assembler? 03  
 c) What do you mean by relocatable loaders? 03  
 d) What is the role of intermediate code? 03  
 e) What do you mean by interpreter? How interpreters are different from compiler. 03