## 

# K19U 0191

Reg. No. : .....

Name : .....

## VI Semester B.C.A. Degree (CBCSS – Reg./Supple./Improv.) Examination, April 2019 (2014 Admission Onwards) Core Course 6B21BCA : SYSTEMS SOFTWARE

Time : 3 Hours

Max. Marks: 40

#### SECTION - A

Answer all questions. Half mark each.

- 1. a) \_\_\_\_\_ phase is concerned with construction of target language statements in language processing.
  - b) The syntax of a literal is \_\_\_\_\_\_
  - c) The problem of forward reference is handled using \_\_\_\_\_\_ in single pass translation.
  - d) The number of addressing modes supported in 8088 microprocessor is
  - e) Memory binding is an association between \_\_\_\_\_ and \_\_\_\_\_
  - f) \_\_\_\_\_ language processor does not generate a target program.
  - g) \_\_\_\_\_\_ object record contains binary image of the code and data generated by the language translator.
  - h) The process of isolating lexical units of a sequence is called \_\_\_\_\_

#### SECTION - B

Answer any 7 questions. 2 marks each.

- 2. What is system software ?
- 3. What are the components of programming language specification ?
- 4. What are the basic facilities of assembly language ?

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- 5. What are the different kinds of macro expansions ?
- 6. Specify the scope rules of a block-structured language.
- 7. What is linker?
- 8. What are the different steps in the execution of a program ?
- 9. What are the different types of statements in a macro definition ?
- 10. What are the aspects of compilation ?
- 11. What are search and allocation data structures ?

#### SECTION - C

Answer any 4 questions. 3 marks each.

- 12. Write a note on data structures used for language processing.
- 13. Discuss about different advanced macro facilities.
- 14. Write an algorithm for second pass of two-pass assembler.
- 15. Explain the features of programming languages.
- 16. Classify the programs based on their relocatability.
- 17. Explain ambiguity in grammars with an example.

### SECTION - D

Answer any 2 questions. 5 marks each.

- 18. Discuss about different language processing activities.
- 19. Explain the design of a macro assembler.
- 20. Discuss about optimizing transformations used in compilers.
- 21. Explain LL(1) parser with an example.