

K17U 0434

Reg. No. :

Name :

VI Semester B.C.A. Degree (CBCSS – Regular) Examination, May 2017 (2014 Admn.) Core Course In B.C.A. 6B21BCA : SYSTEM SOFTWARE

Time : 3 Hours

Max. Marks: 40

SECTION - A

1. One word answer :

(8×0.5=4)

- a) The computer language generally translated to pseudo code is
- b) YACC stands for
- c) _____ frees all allocated but not used spaces.
- d) The graph which shows basic blocks and successor relationships is called
- e) The first program loaded into memory when we turn on or restart a system is
- f) Storage mapping is done by _____
- g) Replacement of an expensive operation by a cheaper one is known as
- h) Type checking normally done during ______

SECTION - B

Write short notes on any seven of the following questions :

 $(7 \times 2 = 14)$

- 2. Define a language processor.
- 3. Describe the properties of intermediate representation of a program.
- 4. Explain the operations of DFA.
- 5. Define assembler directives.

K17U 0434

- 6. List different data structures used by an assembler.
- Write uses of directive set in macro processors.
- 8. Give example for quadruple representation.
- 9. What is program relocation ?
- 10. Give any two drawbacks of stack based memory allocation.
- 11. Name the data structures created and used by two pass linker.

SECTION-C

Answer any four of the following questions :

- 12. Briefly discuss two approaches used for collision handling in hashing.
- 13. Differentiate between static binding and dynamic binding.
- 14. Explain the working of recursive descent purser.
- 15. Explain basic functions of an assembler.
- 16. Briefly explain different data structures used by a macro processor.
- Explain different code optimization techniques.

SECTION - D

Write an essay on any two of the following :

- Explain different memory management techniques.
- 19. How is forward referencing handled by a single pass assembler ? Explain.
- 20. Compare and contrast macros and subroutine.

Explain the working of overlays.

 $(4 \times 3 = 12)$

 $(2 \times 5 = 10)$