K20U 0098



Reg. I	No. :	 	•••••
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# VI Semester B.Sc. Degree (CBCSS-Reg./Supple./Improv.) Examination, April 2020 (2014 Admission Onwards) **CORE COURSE IN COMPUTER SCIENCE** 6B13CSC: System Software

Time: 3 Hours

Max. Marks: 40

## SECTION - A

One word answer.  $(8 \times 0.5 = 4)$ 1. a) Which denotes the rules of meaning of a domain? b) A single pass assembler uses \_\_\_\_\_ technique to handle forward references. c) Which performs memory allocation for entities in a program? d) The address assigned to its first instruction by a linker is called e) Type-2 and type-3 grammars are also called as f) Which statement constructs memory words containing constants? g) A reference to a symbol that is not defined in the program unit containing the reference \_ h) Which loader performs relocation while loading a program for execution?

### SECTION - B

Write short notes on any seven of the following questions.

 $(7 \times 2 = 14)$ 

- What is the use of program counter?
- 3. What is the need of multi-pass organization in language processors?
- 4. What are literals?

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- 5. What is instruction address?
- 6. What is relocation?
- 7. What is address sensitive program?
- 8. What are parse trees?
- 9. What is recursive descent parser?
- 10. What is binding?
- 11. What is global optimization?

## SECTION - C

Write short notes on any four of the following questions:

 $(4 \times 3 = 12)$ 

- 12. What are the typical functionalities of system software?
- 13. Compare compilers and interpreters.
- 14. What is LC processing?
- 15. Differentiate EXTRN and ENTRY statements.
- 16. Define Finite State Automata.
- 17. What are the main benefits of multi-pass compilers?

#### SECTION – D

Write short notes on any two of the following questions:

 $(2 \times 5 = 10)$ 

- 18. Discuss symbol table entry formats.
- 19. Discuss the elements of assembly language programming.
- 20. Explain classification of grammars with examples.
- 21. Discuss function and procedure calls in compilation.