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CAVIS 361 A-2K14
B.C.A. VIth Semester Degree Examination
Computer Science
(System Software)
Paper - BCA 6.5(B) (Elective-II)

Time :3 Hours

Maximum Marks : 80

Section - A

1. Answer all questions:

(10×2=20)

- a) What is lexical analysis?
- b) What is passing?
- c) Briefly explain storage allocation.
- d) Why compiler design are must in programming language.
- e) Mention the function of interpreters.
- f) Draw a parse tree for $a + b * c - d$.
- g) Explain the software tools.
- h) Define Debug, syntax and logical bug.
- i) Define dynamic linkage.
- j) What are the different types of code optimization.

Section - B

Answer any **four** questions. Each carries **five** marks.

(4×5=20)

2. Write the instruction formats of one, two and three bytes.
3. Explain the finite state automate.
4. Draw the neat diagram for design of a macro preprocessor.
5. Briefly explain the different components of programming environment.

6. What are the different functions of assembler.
7. What are the advantages of linkage editor.

Section - C

Answer any **four** questions. Each carries **ten** marks.

(4×10=40)

8. What are the role of user interface in simplifying the instruction.
 9. Write an algorithm for two pass assembler.
 10. Why macro expansion is used. Write an algorithm for it.
 11. What is expression tree? Write an expression tree for $(a+b)/(c+d)$.
 12. What are the difference between static and dynamic memory allocation? Explain with diagrammatically.
 13. What are the uses of program pre-processing and instruction with examples.
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