BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE) B.Tech.Sem - VII IT: WINTER- 2022 SUBJECT: COMPILER CONSTRUCTION & DESIGN

Time: 02:30 PM-05:30 PM

Day: Wednesday

Date: 07-12-2022 Max. Marks: 60 W-13427-2022 N. B. : All questions are **COMPULSORY**. 1) 2) Figures to the right indicate FULL marks. Assume suitable data if necessary. 3) Describe the tasks of lexical analyzer in detail. (10)Q. 1 OR Discuss the role of finite automata in compiler construction. (10)Explain Bottom-up parser with example. Q. 2 (10)OR With block schematic explain the working of LR parser. **(10)** Explain concept of syntax directed definition. (10)Q. 3 (10)Construct DAG for a + a * (b - c) + (b - c) * d. Which are the various errors encountered in compiler phases? **(10)** Q. 4 OR Discuss various source language issues that affect the organization of (10)memory. Q. 5 What is 'Peephole optimization'? (10)OR Write a short note on 'Run time storage management'. (10)Q. 6 Briefly explain source and target language issues. (10)Discuss case study of GNU C compiler. (10)

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