B.Tech. SEM -VII Info. Tech. 2014 Course (CBCS) : SUMMER - 2019

SUBJECT: COMPILER CONSTRUCTION AND DESIGN

Day: Thursday
Date: 09/05/2019

Time: 02.30 PM TO 05.30 PM
Max Marks: 60

S-2019-2827

N.B.:

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Assume suitable data if necessary.
4) Use of nonprogrammable of **CALCULATOR** is allowed.

Q.1 Explain the different phases of compiler in detail with example. **(10)**

OR

Q.1 Write a short note on following terms (ANY TWO) **(10)**

i) Preprocessor
ii) Assembler
iii) Interpreters

Q.2 Explain the term Grammar in detail. What is Contex Free Grammar? Define with proper structure. **(10)**

OR

Q.2 Differentiate between Top Down parsing and Bottom Up parsing with example. **(10)**

Q.3 Analyze and define Syntax Directed Translation with example. **(10)**

OR

Q.3 How Bottom Up evaluation is effective in Syntax Translation Process. **(10)**

Q.4 How storage organization and stock allocation is essential for effective runtime environment. **(10)**

OR

Q.4 Write down functionality and Importance of heap management with suitable data. **(10)**

Q.5 What are the code generation techniques available? Discuss different issues in code generation? How to tackle with these issues? **(10)**

OR

Q.5 How run time storage management is done during code generation? **(10)**

Q.6 Discuss different code optimization techniques with some principal sources. **(10)**

OR

Q.6 Explain the term Global Data Flow analysis with suitable diagram **(10)**

* * * * *