



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India

(Autonomous College Affiliated to University of Mumbai)

Mid Semester Examination

March 2018

Max. Marks: 30

Class: TE

Course Code: CPC601

Name of the Course: System Programming and Compiler construction

Duration: 90 Mins

Semester: VI

Branch: Computer

Instruction:

- (1) All questions are compulsory
- (2) Draw neat diagrams
- (3) Assume suitable data if necessary

Q No.		Max. Marks	CO
Q.1	Illustrate the concept of an absolute loader? What are its disadvantages? OR With reference to Direct Linking Loader, what is the use of GEST and LESA?	05	CO1
Q.2	What are the different storage allocation strategies? Explain stack allocation strategy in detail. OR Explain the importance and contents of Symbol Table with reference to RUN TIME Storage management? Suggest at least two data structures for maintaining SYMBOL TABLE ?	05	CO5
Q.3	What are the different conditional reordering pseudo-ops available with reference to Macro processor? Explain with example.	05	CO2
Q.4	With reference to Two pass assembler give the use of following Pseudo ops using short example. 1. USING and DROP 2. LORG	05	CO2
Q.5	$S \rightarrow S * E$ $S \rightarrow E$ $E \rightarrow F + E$ $E \rightarrow F$ $F \rightarrow id$ Find whether the above grammar is LL(1) or not. Construct LL(1) parsing table.	6	CO3
Q.6	Write a short note on input buffering in lexical analysis with example.	4	CO3