TE / Com / Sem VI / Rev
System program & complier constr

P4–Exam.–Oct.–10–64

Con. 5559–10. **(REVISED COURSE)** **GT–7563**

(3 Hours) **[Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**.
(2) Solve any **four** questionsout of remaining.
(3) Assume **suitable** data if **necessary**.

1. (a) What is function of interpreter ? **5**
   (b) Explain operator precedence parsing. **5**
   (c) Explain run time storage allocation strategies. **5**
   (d) Explain the role of finite regular state automata in compiler design. **5**

2. (a) Explain the design of direct linking loader in detail. **10**
   (b) Explain with suitable flow chart working of single pass assembler. **10**

3. (a) Explain design of one pass macro-processor to handle nested macro calls. **10**
   (b) Explain difference between :– **10**
   (i) Procedure calls and macro calls
   (ii) Linker and Loaders.

4. (a) Explain difference between JAVA compiler and YACC compiler. **10**
   (b) Explain difference between linkage editor and linkage loader. **10**

5. (a) Explain various form of the intermediate code used by compiler. **10**
   (b) What is source of optimization ? **5**
   (c) Explain role of lexical analyzer. **5**

6. (a) Explain different phases of compiler in details. **10**
   (b) Explain management of variable length block and storage allocation strategies. **10**

7. Short notes on :– **20**
   (a) Implementation of three address statement
   (b) Storage allocation strategies
   (c) YACC
   (d) SPARC assembler.