

**Question Bank (G scheme)**

**Name of subject: SYSTEM PROGRAMMING**

**Unit Test :II**

**Subject code: 17517**

**Course : CM**

**Semester: V**

**CHAPTER 4: Loaders and linking(20 Marks)**

**3 Marks**

1. Explain design of direct linking loader.
2. Explain working of absolute loader with neat diagram.
3. State and explain working of DDL.
4. State and explain need of Global External Symbol Table(GEST) and Local External Storage Array(LESA).
5. What are the address constant? Give example of following type of address constants
  - a)Simple relocatable
  - b)Absolute
6. Explain use of ESD,TXT,RLD,END cards used in loader.

**4 Marks**

7. Explain compile-and-go loader.
8. Compare linker and loader.
9. What is purpose of ID number on ESD card? Why it is not needed for locally defined symbols.
10. What is loader? How it works? Explain with diagrammatically.
11. List the database required for pass 1 and pass 2 of directing linking loader with their purpose.
12. Define allocation ,relocation, linking, loading.
13. Explain overlay structure used in dynamic loading scheme.

**CHAPTER 5: COMPILER (24 Marks)**

**3 Marks**

14. Draw the block diagram of phases of compiler and indicate the main function of each phase.
15. Explain four purpose of storage assignment phases of compiler.

16. Describe the interpretation phase of compiler.
17. Explain simple machine independent optimization algorithm with example.

**4 Marks**

18. Write down the algorithm of lexical analysis phase of compiler and explain with example.
19. Explain in detail machine dependent optimization.
20. Explain following :
  - a) Prediction
  - b) Matching
  - c) Backtracking
- 21) Explain top down parsing without backtracking.

**CHAPTER 6: PARSING (10 Marks)**

**3 Marks**

- 22) Explain parser in Detail?
- 23) Explain shift reduce action in bottom up parsing?

**4 Marks**

- 24) Draw and explain parse tree?
- 25) what is predictive parser?