

Roll No. ....

Total No. of Pages : 2

Total No. of Questions : 07

**BCA (Sem.-5)**  
**SYSTEM SOFTWARE**  
**Subject Code : BC-502**  
**Paper ID : [B0220]**

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY.
2. Attempt any FOUR questions from SECTION-B.

**SECTION-A** (10 × 2 = 20 Marks)

1. Write short notes on :

assembly language.

- (b) Illustrate macro expansion with suitable example.
- (c) What is compiler? How it is different from interpreter?
- (d) Explain how one pass assembler is different from two pass assembler.
- (e) List advantages and disadvantages of two pass assembler.
- (f) What is program linking?
- (g) List advantages of dynamic linking.
- (h) Why operating system is called resource manager?
  
- (j) What is time sharing operating system? What are its advantages and disadvantages?

**SECTION-B** (4 × 10 = 40 Marks)

2. Explain the following :
  - (a) Assembly Scheme
  - (b) One pass assembler

3. Define macro. What are its advantages and disadvantages? Explain design of macro processor.
4. What is lexical analysis? What is its need? Explain how lexical analysis is different from syntax analysis ?
5. What is need of code optimization? Explain local and global optimization techniques with their relative merits and demerits
6. Write notes on the following:
  - (a) Linkage editor
  - (b) Bootstrap loader ;
7. What is DBMS? What are its advantages and disadvantages? Explain three level architecture of DBMS.