

Exam. Code : 206703

Subject Code : 4691

M.Sc. Computer Science 3rd Semester

SYSTEM SOFTWARE

Paper—MCS-302

Time Allowed—Three Hours] [Maximum Marks—100

Note :— Attempt **FIVE** questions, selecting at least **ONE** question from each part. The **fifth** question may be attempted from any part.

PART—A

1. (a) Discuss the evolution of system software. 10
(b) Design a comparison report between interpreters, compilers and assemblers. 10
2. What is an assembler ? Discuss various phases of one pass assembler with the help of a block diagram. 20

PART—B

3. (a) What is a Macro and its expansion ? Discuss with suitable examples. 10
(b) Distinguish between conditional macro expansion and recursive macro expansion with the help of a suitable code fragments. 10
4. (a) What is recursive micro expansion ? Explain macro expansion by taking suitable examples. 10
(b) Write a note on conditional MACRO. 10

PART—C

5. Explain the various phases of compiler with help of a block diagram. 20
6. Write short notes on the following terms :
- (i) P code compiler
 - (ii) Cross compiler
 - (iii) Incremental compiler
 - (iv) Parsing. $5 \times 4 = 20$

PART—D

7. (a) Explain the salient features 'Loaders' in detail. 10
- (b) Explain 'Relocation' and 'Program Linking' in detail. 10
8. Write short notes on the following terms :
- (a) Text Editors
 - (b) DBMS. $10 \times 2 = 20$