

Total number of printed pages:

Programme(D)/III/DCSE302

2022

SYSTEM PROGRAMMING

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions.

1. a) What are assembly language and high level language? Write their relative merits and demerits. 6 + 4=10
- b) What do you mean by system program? For what purpose system programs are used? Give examples. 2+2+2=6
- c) What is linking? What are its main functions? 2+2=4
2. a) What is macro? What is macro expansion? Write the algorithm for macro expansion. 2+3+5=10
- b) Explain the imperative, declarative and assembler directive statements with suitable examples. 10
3. List out the phases of a compiler with the help of a neat diagram. Briefly explain them. 20
4. a) What are the types of addressing modes? Explain them. 10
- b) Explain the different types of registers in 8085 microprocessors. 10
5. a) Explain the absolute loader. What are its demerits? 8+2=10
- b) Describe the compile-and-go loader. 10
6. Write short notes on the following: (any two) 2x10=20
 - i) Macro definition and call
 - ii) Two pass assembler
 - iii) Data transfer and branch instructions