



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FIFTH SEMESTER – APRIL 2022

16/17/18UCS5ES03 – SYSTEMS PROGRAMMING

Date: 21-06-2022

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

PART – A

(10x 2 = 20 Marks)

Q. No

Answer ALL Questions

- 1 What is Systems Programming?
- 2 Compare Compiler and Interpreter.
- 3 Define Assembler.
- 4 What is Pseudo-op?
- 5 Define Macro.
- 6 Write down the structure of Macro name table.
- 7 State the functions of Loader.
- 8 What is the purpose of Overlays?
- 9 Define Error handler.
- 10 What is Symbol table?

PART – B

(5 x 8 = 40 Marks)

Answer ALL the Questions

- 11 (a) Explain about the components of System Programming.
(Or)
(b) Explain about Long way, No looping using simple program.
- 12 (a) Draw the micro flowchart for ADD instruction.
(Or)
(b) Explain any two Basic 360 Data formats.
- 13 (a) Write a short note on Conditional macro expansion.
(Or)
(b) Explain about Macro instruction with arguments.
- 14 (a) Write short notes on Subroutine linkages.
(Or)
(b) Explain about Absolute loader scheme.
- 15 (a) Write short notes on the intermediate form of a Compiler.
(Or)
(b) Discuss in brief about the general model of a Compiler.

PART – C

(2 x 20 = 40 Marks)

Answer any TWO Questions

16. (a) Explain about the General structure of IBM 360 Machine.
(b) Elaborate about the algorithm and draw the flowchart for Pass 1 assembler.
17. (a) Discuss about any two Loader schemes in detail.
(b) Elaborate about the Cards and External Symbols used in the design of DirectLinkingLoader.
18. (a) Discuss about the phases of Compiler.
(b) Compare Machine language and Assembly language.

@@@@@@@@