LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.C.A. DEGREE EXAMINATION – **COMPUTER APPLICATIONS**

THIRD SEMESTER – **NOVEMBER 2019**

17/18PCA3ES02 – SYSTEM SOFTWARE

Date: 09-11-2019   Dept. No.   Max. : 100 Marks
Time: 01:00-04:00

Part-A

Answer ALL Questions   (10 × 2= 20)

1. Define Literal pools
2. What are the assembler directives?
3. Compare absolute loader and bootstrap loader.
4. What is role of loader and linker?
5. What is macro instruction?
6. What is a special concatenation operator?
7. Define Lexical analysis.
8. Differentiate between terminal and non-terminal Symbols?
9. List out other system software.
10. Define debugger.

Part – B

Answer Any Five Questions   (5 × 8= 40)

11. a) Explain the symbol defining statements with an example.

(or)

  b) Discuss different addressing modes.

12. a) Explain basic loader functions.

(or)

  b) Write short notes on machine independent loader features.

13. a). Illustrate the macro definitions and expansion with an example.

(or)

  b). Explain Recursive macro expansion.

14. a) Explain operator precedence parsing with an example.

(or)

  b) Explain compiler design options in detail.

15. a) Write short notes on Text editor.

<div align="center">(or)</div>

b). Explain debugging functions and capabilities.

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Part – C

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Answer any TWO Questions   **(2 × 20= 40)**

16. a) Discuss basic assembler functions.

b) Describe the following machine dependent loader function

i) Relocation   ii) Program linking

17. a) Describe Macro processor algorithm in detail.

b) Explain machine dependent code optimization in detail.

18. a) Describe the following.

i) User Interface

ii) Editor structure

b) Discuss the following basic compiler functions.

i) Grammars

ii) Code generation

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