# Vijaya College

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### VI SEM BCA Model Question Paper 2

## **BCA 602: System Programming**

#### SECTION – A

10x2=20

I. Answer any ten questions. Each question carries two marks

- 1. What is LTORG?
- 2. List any 4 assembler directives.
- 3. List any two advantages of assembly language.
- 4. What is Declaration Statement? Give example.
- 5. Mention any two disadvantages of Radix sort.
- 6. Differentiate between macro and subroutine
- 7. Define Macro definition table.
- 8. Write the four basic task that can be performed by macro-instruction processor.
- 9. What are the functions of the loader?
- 10. Define Relocation factor.
- 11. What is intermediate form?
- 12. What is a token? Give example.

### SECTION – B

- II. Answer any five questions. Each question carries five marks 5x5=25
  - 13. Explain the general machine structures with neat diagram.
  - 14. What is sorting? Explain briefly about Bubble sort.
  - 15. Explain databases used in Pass 1 and Pass 2 assemblers.
  - 16. Explain the features of macro facility in detail.
  - 17. Explain macro instructions defining macros.
  - 18. Explain compile-and-go loader with a neat diagram.
  - 19. Define binder. What are the classes of binders? Explain.
  - 20. What are the functions of analysis and synthesis phases of the compiler?

### SECTION – C

- III. Answer any three questions. Each question carries fifteen marks 3x15=45
  - 21. a) Explain various instruction formats used in IBM 360.
    - b) Explain the use of literals in assembly language programs using example.
  - 22. a) Draw the detailed Pass 2 flowchart of an assembler.

- b) What is an assembler directive? Explain any five assembler directives with an example.
- 23. a) Give the database specifications for Pass 1 Pass 2 of macro processor.
  - b) Explain the four basic tasks of macroprocessor.
- 24. a) Explain design of absolute loader with a neat diagram.
  - b) Explain the overlay structures for linking.
- 25. a) Explain structure of compiler with a diagram.
  - b) Explain identifier table for the phases of compiler.

#### SECTION – D

IV. Answer any one question. Each question carries 10 marks

1x10=10

26.

- a) Differentiate between Pseudo-op and machine-op with example
- b) Draw the micro-flow chart for ADD instruction.

27.

- a) Explain Relocatable, Non-relocatable and self relocatable programs.
- b) Explain the use of EXTERN and ENTRY statements.