

Vijaya College

R.V Road, Basavanagudi

VI SEM BCA Model Question Paper 3

BCA 602: System Programming

SECTION – A

I. Answer any ten questions. Each question carries two marks 10x2=20

1. Define System Programming.
2. Mention the functions of Loader.
3. Explain PSW.
4. What is instruction interpreter?
5. Write the format of POT.
6. What is the symbol table? Give its format
7. Differentiate between a macro and subroutine.
8. What is an argument list array?
9. What are overlays?
10. What is dynamic loading?
11. What are the three classes of uniform symbols?
12. Define local and global optimization.

SECTION – B

II. Answer any five questions. Each question carries five marks 5x5=25

13. Explain different data formats used in IBM 360 with an example.
14. Explain long-way-no-looping.
15. Draw an overview flowchart for pass I of an assembler.
16. Explain radix sort with a suitable example.
17. Explain macro definition with arguments with an example.
18. Explain compile-and-go loader with a diagram.
19. Explain the databases used in lexical analysis phase of a compiler.
20. Explain machine dependent optimization.

SECTION – C

III. Answer any three questions. Each question carries fifteen marks 3x15=45

21. a) Explain the general machine structure of IBM 360/370 with a neat diagram.

- b) Draw the detailed PASS -1 flow-chart of an assembler.
- 22. a) Explain data bases used in PASS -1 and PASS -2 of assembler.
b) Explain different data formats used in IBM 360/370 with an example.
- 23. a) Explain simple one pass macro processor.
b) Explain conditional macro expansion.
- 24. a) Explain design of absolute loader with a neat diagram.
b) Explain direct linking loader.
- 25. a) Explain the passes of compiler with neat diagram.
b) Discuss briefly about lexical phase of compiler.

SECTION – D

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

1x10=10

- 26. a) Explain dynamic loading.
b) List the databases used by Pass I and Pass II of the macroprocessor.
- 27. a) Explain Relocatable, Non-relocatable and self relocatable programs.
b) Explain the use of EXTERN and ENTRY statements.