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UESTION BANK

M
ODULE – I

1. Distinguish between Application software and System Software.
2. Explain three functions of Operating System.
3. What are the different System software.
4. Explain the instruction format and addressing modes of SIC.
5. Let NUMBERS be an array of 100 words. Write a sequence of instructions for SIC to set all 100 elements of array to1.
6. Write notes on SIC machine architecture.
7. List out the various registers used in SIC along with their purpose
8. Compare the features of Standard SIC and SIC/XE architecture.
9. Write notes on the architecture of SIC/XE.
10. Explain with suitable examples, how the different instruction formats and addressing modes of SIC/XE are handled during assembling. .
11. Let A,B and C are arrays of 10 words each. Write a SIC/XE program to add the corresponding elements of A & B and store the result in C.
12. Write a sequence of instructions for SIC/XE to find the average of three numbers, BETA,GAMMA and DELTA.

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ODULE – II

1. List out the basic functions of Assembler with proper examples.
2. Explain the syntax of record in the Object Program File.
3. What is a forward reference? How are forward reference handled by single pass assembler.
4. What is a forward reference? How is forward reference handled by two pass assembler?
5. Describe the format of object program generated by two pass SIC assembler algorithm, highlighting the contents of each record type.
6. Explain the different data structures used in the implementation of assembler.

7. Describe the data structures used in the two pass SIC assembler algorithm(3)
8. Explain the concept of single pass assembler with a suitable example. marks.

9. With the aid of an algorithm explain the Second pass of a Two Pass Assembler.
10. Write the algorithms for Pass 1 and Pass 2 of a two pass assembler..
11. Explain the two passes of the assembler algorithm with proper example.
12. Describe the format of object program generated by the two pass SIC assembler algorithm.
13. Write down the format of Modification record .Describe each field with the help of an example.
14. Explain program relocation with an example.

MODULE – III

1 What is a Literal? How is a literal handled by an assembler?
2 Withexample, write notes on Program Blocks.
3 Distinguish between Program blocks and control sections.
4 Explain how address calculation is performed in the case of Program blocks?
5 Explain the format and purpose of Define and Refer records in the object program.
6 How are control sections different from program blocks? Explain,with proper examples,the purpose of EXTREF and EXTDEF assembler directives.
7 Explain how external references are handled by an assembler.
8 What are control sections?What is the advantage of using them?
9 Differenciate Define record and Refer record.
10 .Explain the concept of single pass assembler with a suitable example.
11 Explain with examples the working of a multi pass assembler.
12 Write notes on Multi pass assemblers.
13 What is forward reference?How are forward references handled by a single pass assembler
14 How the assembler handles multiple program blocks
15 15 Write short notes on MASM assembler.

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ODULE – IV

1. What do you mean by loader.
2. Explain the basic Loader function
3. What is meant by absolute loader?
4.
5. Explain the loader design optios.
6. Write a note on virtual machine.
7. List out machine dependent and machine independent loader features.
8. Differentiate Linker and Loader.
9. Specify he use of Bit mask in loader.
10. Illustrate the processing of object program using linkage loader and linkage editor.
11. List out and explain the basic functions used while designing the loader.

MODULE – V

1. Describe shortly about basic macro processor functions .
2. Explain about machine independent macro processor features.
3. Draw and explain the single pass algorithm of macro processor.
4. How will you concatenate macroparameter?
5. How is the macro processor deals with invocation of one macro by another be implemented.
6. What do you mean by macro? List out any 4 macro call.
7. Explain the structure of Macro Definition Table.
8. What is Argument list array in macro.
9. What is text editor.
10. Explain Editor structure.
11. Describe the user interface.
12. Describe the functions of Debugger.
13. Explain the methods for Debugging
13. What is induction?
14. What are the capabilities of Debugging?
16. Explain in detail about Deduction.
15. Explain in detail about Backtracking.