BCA (Honours) 5th Semester Examination, 2022

Subject : Computer Application

Course : BCA-501

(System Software)

Time: 4 Hours   Full Marks: 80

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.

Answer Question No. 1 and *any four* question from the rest.

1. Answer *any eight* questions: 2×8=16
   - (a) What is macro call?
   - (b) What is absolute loader?
   - (c) What is linker?
   - (d) What is system software?
   - (e) Give examples of markable interrupts.
   - (f) What is token?
   - (g) Give one examples of 3-address code.
   - (h) What is text editing?
   - (i) What is symbol table?
   - (j) What is Parsing?
   - (k) Which type of error cannot be checked by compiler?
   - (l) What are the difference between 8085 & 8086 Microprocessor?

2. (a) Discuss the main functions of the different phases of compiler in brief with diagram.
   (b) What is the difference between compiler and interpreter?   12+4=16

3. What is assembler? Explain pass-2 assembler in brief with suitable diagram.   4+12

4. (a) Draw and explain the architectural diagram of 8086 microprocessor.
   (b) Explain different types of addressing mode present in 8086·microprocessor.   10+6=16

5. What is general purpose macro processor? Write the advantages and disadvantages of general purpose macro processor. What is nested macro call?   16

6. (a) Discuss any two code optimization technique.
   (b) Write a short note on Directed Acyclic Graph (DAG).   8+8=16

7. (a) Illustrate S-Directed and L-Directed Translations in Syntax Directed Translation.
   (b) Briefly explain 3-address code representation.   8+8=16

8. (a) Explain Shift Reduce Parsing. Illustrate with an example.
   (b) What is LL parsing techniques? Illustrate with an example.   8+8=16

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