

124/A-39

SEAT No. \_\_\_\_\_

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SC

SARDAR PATEL UNIVERSITY

B.C.A. (SEM - VI) EXAMINATION MARCH/APRIL - 2019

US06FBCA01 : SYSTEM SOFTWARE

Date: 25/03/2019, Monday

Time: 02:00 to 05:00 PM

Total Marks : 70

Q.1 Multiple choice questions:

[10]

- 1 The gap between Application domain and PL domain is called \_\_\_\_\_.  
A. Execution Gap  
B. Specification Gap  
C. Application Gap  
D. Semantic Gap
- 2 \_\_\_\_\_ governs the formation of valid lexical units in the source language.  
A. Specification Rules  
B. Lexical Rules  
C. Syntax Rules  
D. Semantic Rules
- 3 \_\_\_\_\_ data structure is used in synthesis phase.  
A. Symbol table  
B. DFD  
C. Name table  
D. All of the above
- 4 \_\_\_\_\_ is a data structure to implement memory allocation.  
A. Location table  
B. Location count  
C. Location counter  
D. Location area
- 5 In a simple assembly language, the first operand is always \_\_\_\_\_.  
A. Memory Word  
B. Register  
C. Assembly Mnemonic  
D. None of these
- 6 Address of the origin assigned by the linker while producing a binary program is called \_\_\_\_\_.  
A. Load origin  
B. Linked origin  
C. Translated origin  
D. None of these
- 7 \_\_\_\_\_ is the process of binding an external reference to the correct link time address.  
A. Translation  
B. Linking  
C. Loading  
D. None of above
- 8 A \_\_\_\_\_ views the entire text as a stream of characters.  
A. Stream editor  
B. Screen editor  
C. Line editor  
D. Structure editor
- 9 \_\_\_\_\_ helps in obtaining information for localization of errors.  
A. Debug Monitors  
B. Profile Monitors  
C. Editors  
D. All of above
- 10 \_\_\_\_\_ accepts user commands specifying the editing function to be performed.  
A. Data Mode  
B. Command Mode  
C. Language Processor  
D. Software Tools

- Q.2 Write a short note on any 10. [20]
1. What are structure editor and pretty printer?
  2. Define the Lexical & Semantic Rule.
  3. Draw a diagram of a language processing system.
  4. Give Instruction opcode and function of following assembly mnemonic.  
[1] STOP [2] SUB [3] MOVER [4] READ
  5. Explain DS of declaration statements in brief.
  6. Define Imperative statements.
  7. Explain any one Editor.
  8. Explain linking.
  9. Draw the schematic diagram of program execution.
  10. What is a user interfaces?
  11. Explain Debug Monitor
  12. List down fundamental steps in program development.
- Q.3 (A) List the phases of a compiler and explain the symbol table management, error detection reporting. [5]
- Q.3 (B) What is Language Processing? Explain Application, PL & Execution domain. [5]
- OR
- Q.3 (A) Explain Language Processing Activity in detail. [5]
- Q.3 (B) Explain the context of a compiler. [5]
- Q.4 (A) Write advantages of assembly language. [5]
- Q.4 (B) Explain analysis phase in detail. [5]
- OR
- Q.4 (A) Explain synthesis phase in detail. [5]
- Q.4 (B) Explain Elements of Assembly language programming in detail. [5]
- Q.5 (A) Explain Translated, Linked and Load time address. [5]
- Q.5 (B) Define program relocation and perform relocation. [5]
- OR
- Q.5 (A) Define process of Linking. [5]
- Q.5 (B) Explain Loading with Example. [5]
- Q.6(A) Explain Program Testing and Debugging. [5]
- Q.6(B) Explain structure of user interface. [5]
- OR
- Q.6(A) Discuss way to implement command dialogs. [5]
- Q.6(B) Define Software Tools. Discuss software tools for programming development. [5]