

E 6241



Reg. No.....

Name.....

B.Sc./B.C.A. DEGREE (C.B.C.S.S.) EXAMINATION, SEPTEMBER 2024

Sixth Semester

Choice Based Core Course—SYSTEM SOFTWARE

(Common for B.C.A. and B.Sc. Computer Applications [Triple Main])

(Prior to 2013 Admissions)

Time : Three Hours

Maximum Weight : 25

Section A (Objective Type Questions)

Answer all questions.

A bunch of four questions carries a weight of 1.

- I. 1 _____ is used to translate assembly language programs to machine language.
- a) Interpreter. b) Compiler.
c) Assembler. d) Editor
- 2 The address of next instruction which is to executed is stored in _____.
- a) AC. b) PC.
c) SP. d) IR.
- 3 _____ which associates meaning with valid statements of the language.
- a) Semantic Rules. b) Syntax Rules.
c) Lexical rules. d) None.
- 4 _____ contains information concerning the identifiers and their types.
- a) Memory Table. b) Parse table.
c) Syntax Table. d) Symbol Table.
- II 5 _____ is an example for an assembler directive.
- 6 A problem in single pass assembler is _____.

Turn over





- 7 _____ statement indicates an action to be performed during the execution of the assembled program.
- 8 The location of _____ cannot be specified in the assembly program.
- III. 9 The primary function of the _____ phase is the building of symbol table.
- a) Analysis.
 - b) Design.
 - c) Synthesis.
 - d) Coding.
- 10 A _____ is a unit of specification for program generation through expansion.
- a) Micro.
 - b) Macro.
 - c) Module.
 - d) Function.
- 11 A _____ is a standard assumption in the absence of an explicit specification by the programmer.
- a) Module.
 - b) Statement.
 - c) Address.
 - d) Default.
- 12 The _____ contains the expansion records of a macro.
- a) IR.
 - b) Database.
 - c) Stack.
 - d) Register.
- IV 13 _____ bridges the gap between a PL domain and an execution domain.
- 14 _____ determine the accessibility of variables declared in different blocks of a program.
- 15 _____ is the process of binding an external reference to the correct link time address.
- 16 A file with a _____ Extension contains a non relocatable object program.

(4 × 1 = 4)

Section B (Short Answer Questions)

*Answer any five questions.
Each question carries 1 weight.*

- 17 Distinguish between assembly language and high level language.
- 18 What are language translators ?





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- 19 What is Parsing ?
- 20 What is the impact of forward reference problem ?
- 21 What is a Macro ?
- 22 What is an intermediate code ?
- 23 What is Relocation ?
- 24 What are Loaders ?

(5 × 1 = 5)

Section C ((Short Essays / Problems)

*Answer any **four** questions.
Each question carries 2 weight.*

- 25 Write a note on language processing.
- 26 Explain the need of assembler directives.
- 27 Describe the syntactic structure of a language.
- 28 Explain the role of a linker.
- 29 What are the different types of loaders ?
- 30 Explain different types of grammars.

(4 × 2 = 8)

Section D (Essay Questions)

*Answer any **two** questions.
Each question carries 4 weight.*

- 31 Describe different types of assembly language statements with examples.
- 32 Describe the various phases of a compiler.
- 33 Explain the design of a two pass assembler.

(2 × 4 = 8)

