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"Mid - Term Exam"

Ans-to the -Q- No-1(a)Types of Compiler:

Compilers are divided into three parts -

① Single Pass Compilers. ② Two Pass Compilers.

③ Multipass Compilers. The "compiler" was word

first used in the early 1950s by

Grace Murray Hopper. Steps for Language

processing system are: Preprocessor,
Interpreter, Assembler, Linker / Loader.

Phases of Compiler:

The phases of compiler design are lexical analysis, syntax analysis, semantic analysis,

intermediate code generation, code optimisation,
and code generation.

Ans to the Q No - 1

(b)

Disadvantages of Compiler:

- ① Compilation time.
- ② Error detection.
- ③ Portability.
- ④ Execution speed.
- ⑤ Lack of flexibility.
- ⑥ Resource consumption.

Advantages of Compiler:

- ① Improved performance.
- ② Portability.
- ③ Increased security.

① Debugging support.

② No dependencies.

Ans to the Q No-1

(c)

Compiler design helps full implementation of High-Level Programming Languages, supports optimization for computer architecture parallelism. A compiler is a program that translates a high-level language (for example, C, C++, and Java) into a low-level language (object program on machine program).

Top-down parsing: Top-down parsing in computer science is a parsing strategy where one first looks at the highest level of the parse tree and works down the parse tree by using the rewriting rules of a formal grammar. LL parsers are a type of parser that uses a top-down parsing strategy.

Bottom-up parsing: Bottom parsers work by "shifting" symbols onto a stack until the top of stack contains a right-hand side of a production. The stack is then "reduced" by replacing

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the production's right-hand side by its left-hand side. (1)

Ans. to the Q No-2

(a)

Natural language processing is an interdisciplinary subfield of computer science and linguistics. It is primarily concerned with giving computers the ability to support and manipulate human language.

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Ans - to the Q. No-2

(b)

A cross compiler is a compiler capable of creating executable code for a platform other than the one on which the compiler is running. For example, a compiler that runs on a PC but generates code that runs on an Android smart phone is a cross compiler.

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Ans to the Q No 2

(c)

A source-to-source translator, source-to-source compiler (SS compiler), trans compiler, or transpiler is a type of translator that takes the source code of a program written in a programming language as its input and produces an equivalent source code in the same or a different programming language.