

Name = Khalid Icha

ID = 7936

Section = B

Paper = ICP.



Q = 1 :-

Part (a)

Algorithm & flow chart.

A detailed description of the exact methods used for solving a particular problem.

Flow chart:-

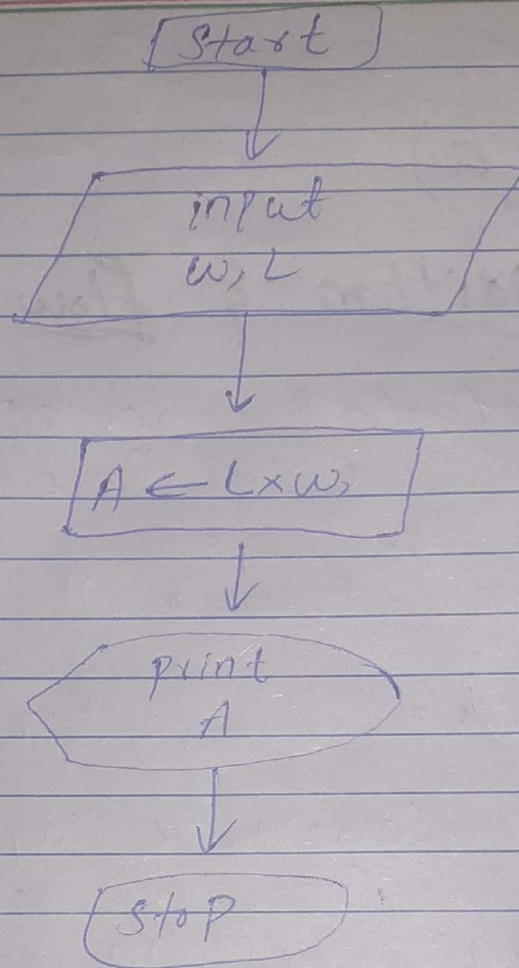
A schematic representation of a sequence of operations, as in a manufacturing process or computer program.

Algorithm;

Step 1:- Input $w, l,$

Step 2:- $A \leftarrow L \times w,$

Step 3:- Print A.



⇒ write an algorithm & draw a flowchart that will read the two sides of a rectangle and calculate its area.

⇒ Pseudo code;

Input the width (w) and length (L) of a rectangle.

calculate the area (A)
by multiplying L with w,

print A.

Part = B :-

Types of errors:

① Syntax errors:-

errors occur when
program contains
grammatical errors.

Exam:-

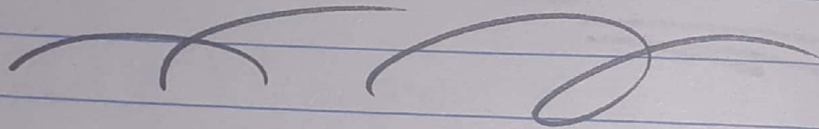
Suppose we didn't
put semicolon at the
end of a statement.

② Run time errors:-

These errors occur
while the program
is running.

③ Logical errors:-

Errors such as
calculation mistakes
etc.



Q = 21-

Part = A1.

<iostream.h>

This is the name of the library definition file for all input output streams. Your program will almost certainly want to send stuff to the screen and read things from the keyboard.

iostream.h is the name of the file in which has code to do that work for you.

Uses of iostream.h & conic.h :-

```
#include <iostream>
#include <conic.h>
using namespace std;
int main()
{
    cout << "Hello";
}
```

```
return 0;  
- getch();
```

```
}
```

In the above code in the `#include <iostream>` header file we don't use the `.h` extension because it produces an error. But if the header file is `#include <conic.h>` the `.h` extension is added. Why does it produce error in case of `#include <iostream>` and not in case of `#include <conic.h>` if we write only `conic` it produces an error. And more question why we use `#include "iostream"` header file when `cout` and `cin` are already included in namespace `std`.

B.V

Maintain & update
the program!

Software maintain is the process of modifying software product after it has been delivered to the customer. The main purpose of software maintenance is to modify and update software application after delivery to correct faults and to improve performance.

Need for maintain.

Software maintenance must be performed in order to

- ⇒ correct faults.
- ⇒ improve the design.
- ⇒ Implement with other system.

Day. MTWTF S

Date. / /

⇒ Accommodate programs
so that different
hardware, software, system
features, and telecommunications
facilities can be used.

⇒ Migrate legacy software
⇒ Retire software.

/// -

Q = 3

A :-

Bugs & Debugs:-

⇒ Bugs are errors in code of your program that make your program function improperly ⇒ fixing bugs is called debugs.

Debugging is generally a feature in major IDEs like Visual Studio, NetBeans, CLion, PyCharm etc.

⇒ Bugs are usually seen in video games and in development apps and beta versions of these apps.

⇒ Developers debug their apps and games and make sure that the bug doesn't exist.

B Syntax error & logical error :-

⇒ Syntax error occur when our program contain some grammatical error.

Logical error

⇒ Error such as calculation mistake.

C Compiler & Assembler :-

⇒ Compiler compiles entire C source code into machine code.

⇒ Assembler is a program that converts assembler level language (low level language) into machine level language.

(D) System Software :-

System Software is the type of software which is the interface b/w application software and system.

Application Software :-

Application Software is the type of software which runs as per user request. It runs on the platform which is provide by system software.

(E) Low Level Language :-

- ⇒ Direct memory management.
- ⇒ Much faster than high level.
- ⇒ Superb performance but hard to write.
- ⇒ Few support and hard to learn.

High Level Language:-

- ⇒ They are Interpreted.
- ⇒ Poor performance.
- ⇒ codes are ~~code~~ concise
- ⇒ Large community.
- ⇒ Flexible Syntax &
- ⇒ easy to read.

