(b) Painter's Algorithm is used for ordering of visibility of an object. If objects are reversed in a particular order, then correct picture result.

Objects are arranged in increasing order to z coordinate. Rendering is done in order of z coordinate. Further objects will obscure near one. Pixels of rear one will overwrite pixels of further objects. If z values of two overlap, we can determine the correct order from Z values.

The concept has taken color from painter or artist. When the painter makes a painting, first of all, he will paint the entire canvas with the background color. Then more distance object like mountains, trees are added. Then near or foreground objects are added to picture. Similar approach we will use. We will sort surfaces according to z values are stored in the refresh buffer.

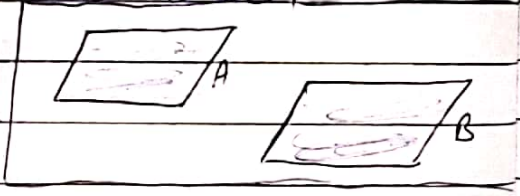
Algorithm &

I Start

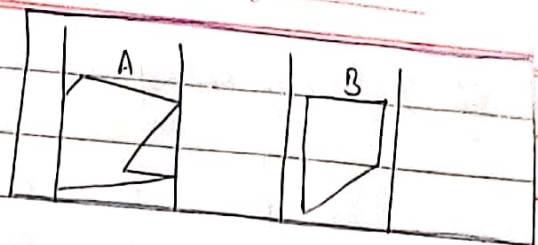
II Sort all polygons by z value keep the largest value of z first.

III Scan converts polygons in this order Test is Applied

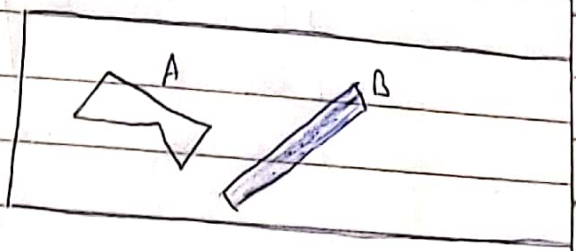
i) Does A is behind and non overlapping B in Z dimension



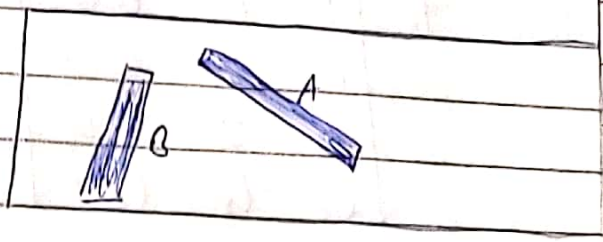
ii) Does A is behind B in z and no overlapping in x or y



iii) If A is behind B in Z and totally outside B with respect to view plane



iv) If A is behind B in Z and B is totally inside A with respect to view plane



The success of any test with single overlapping polygon allows F to be painted.

Advantages & i) Easy To Implement
ii) It reduces the speed problem if implemented in hardware.
iii) It processes one object at a time.

Disadvantages & i) It Requires large memory
ii) It is time consuming process.