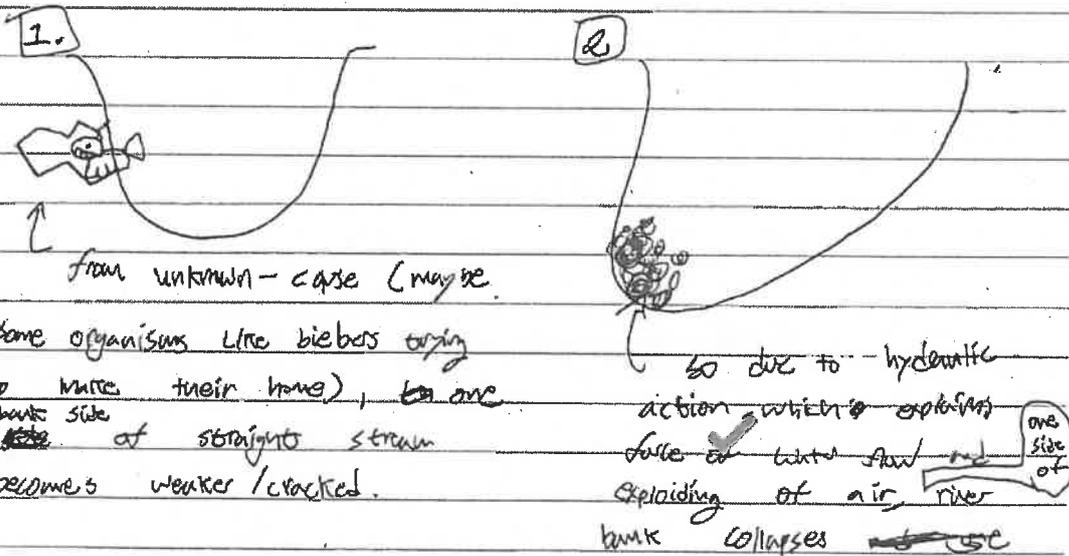


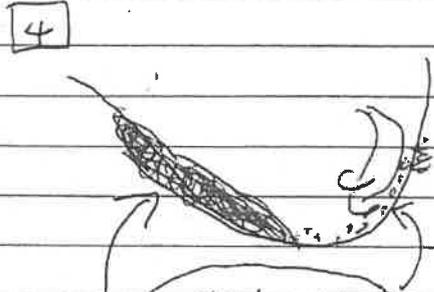
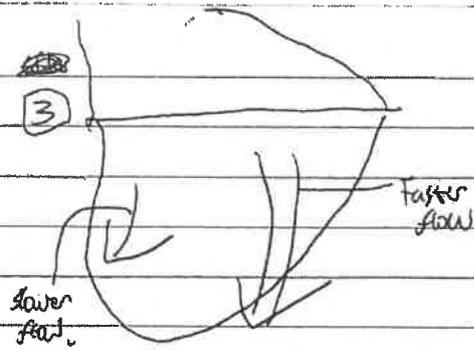
(i) channelization, which straightening the meandering river, can mitigate flood risk. Bease river is rapidly discharged into the other place (such as ocean).
River Thur in Switzerland also mitigated flood risk through channelization.

(ii) Examine the relative importance of erosion and deposition in the formation of floodplains and meanders.

The flood plains and meanders are important features of river as they can provide habitats and fertile land for human and the nature. They are created through the combination process of both erosion and deposition, and in this essay, I will examine relative importance of erosion and deposition in the formation of floodplains and meanders.

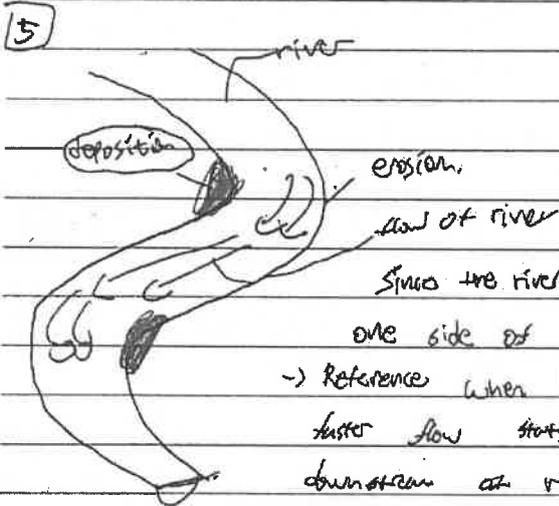
First, Meanders are typical features in middle course of the river. The diagrams below explains how meanders are formed:





This leads to one side of river bank became to have faster speed than the other side (which was eroded).

ablation cutting away of river bank by loads carried and hydraulic action erodes faster low side.



these eroded particles and sediments are deposited on the other side of river (where had slower flow).

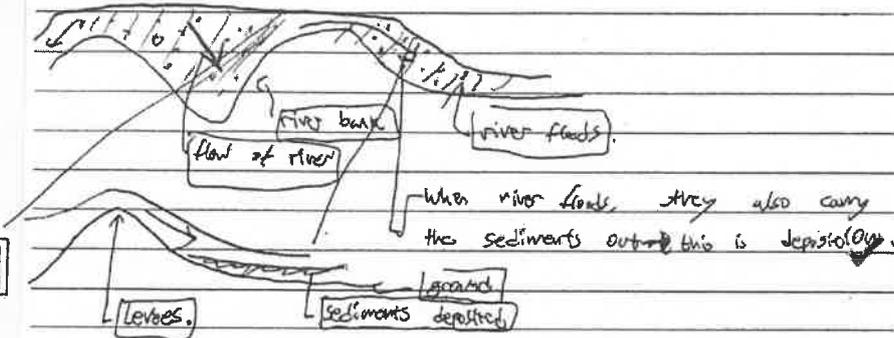
Since the river starts to curve, one side of river flows faster
 -> Reference when bus drives in a curve way, faster flow starts to strike a further downstream on river and creates another curve. This leads to formation of meander.

As explained in diagrams, in order to meander, both erosion and deposition are important. Erosion firstly wears the river bank/belt, and sediments from here is deposited on the other side and creates a meander.

However, when examining the case of flood plain, we can say that ^{deposition} is more important. Floodplain is a river feature in middle - low streams. Floodplain forms when



there is a flood. Diagrams also explain this.



When water excavates outside, it excavates huge areas so velocity reduces. Therefore they deposit sediments outside. After the flood these sediments stay outside of the river, and this is called flood plain. It is really fertile land, so used for agriculture (Bangladesh for example).

As no erosion occurs during formation of floodplain, (only deposition) it can be said that erosion is not important to create floodplain. However, if you consider where this sediment comes from, it is erosion. Sediments are the result of erosion in the upstream. In upstream small particles are made through abrasion and attrition. Therefore, erosion is equally important in the formation of floodplains as the sediment is result of erosion.

In conclusion, erosion and deposition are equally important in the formation of floodplain as the process includes both. Also, both are important to make floodplains even though only deposition occurs here, because deposited sediments are the result of erosion.

both well understood, with some eval

