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1. Learning Outcomes

After studying this module, you will be able to

- Know what are alterations
- Learn the difference between addition and deletion
- Identify the alteration in documents

2. Introduction to Alteration

Alteration is defined as any change to a document which gives it a different effect from that it originally possessed. If change is made after execution of a document and without the consent of the other party or concerned person, then such change is called fraudulent duate Course alteration.

The alteration can be done by:

- Addition /Interlineations
- Overwriting

Features of fraudulent alteration:

- These alterations are done in such a way that they may pass unnoticed under regular examination of the document.
- The alteration methods are usually latent or may be so minute that an unskilled or incompetent examiner may not be able to detect them.

3. Addition

Addition in the document is defined as the insertion of any word, digit etc which changes the meaning or value of the document. These insertions are made in such spaces as may have been left blank in the regular entries either in the middle or at the bottom of the

If additional matter is written in a small space the size of letters will be smaller and writing will appear cramped or if space is large enough then letters are in large size to cover up the remaining space.

In addition alteration the examination can be done to identify the characteristic features of handwriting:

- size of letter,
- spacing and pen-strokes
- Colour ink should be made.

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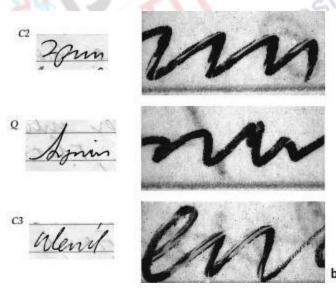
4. Case Study related to Alteration: Addition

The alteration of document by addition can be best understood by the case study as follows:

A case was submitted which required determining whether an entry in a diary that read "Meeting 2pm Signing Wend" (sic) was all written sequentially on the one occasion.

The examination revealed that the words "Meeting", "2pm" and "Wend" all exhibited similar void or stria patterns whereas the word "Signing" did not exhibit a corresponding stria pattern. Such stria patterns are caused by burrs on the ball housing and/or an accumulation of fibres and other materials that build up between the ball and the housing. These burrs and/or extraneous materials cause ink to be wiped from the rotating ball during the act of writing and create a consistent pattern whilst ever the grasp of the pen remains constant.

In this case the inconsistency in the stria pattern provides strong evidence that the word "Signing" was not written as a sequential part of the entire entry.





Examples of fibres caught between ball and ball housing of ball point pens.



5. Interlineations

Interlineations defined as the writing between the lines of any instrument for the purpose of adding to it or correcting what has been written.

In examining interlineations, the tint or colour of ink, quality of pen, size of letters, sequence of crossing strokes and the parts of letters which come in contact with the originally written letters should be minutely studied. The fraudulent entries are likely to differ from the original or adjacent writing in size, slant and spacing and the shade of ink etc.

6. Sheet insertion

It is generally found that the public documents and accounts books, Bahis of the factories or offices are changes by insertion of extra or substituted pages. In such cases, the paper should be examined with regard to its colour and shade, thickness, calendar and water- mark. Secondly, the ink of the writing is observed under a microscope. Thirdly, the line to line space of the line should be compared if the papers are ruled ones.

The system of binding if damaged will also serve the purpose of detecting the fraudulent substitution of the leaves.

The removal of a page from any document and substituting another in its place containing matter having different meaning from that of the page removed is a kind of fraud. The substituted page may have similar appearance of the colour of paper and its composition may be different from other pages of the book. If the substituted document is written by pen and ink the examination and comparison of the colour or tint of ink, pen and the characters of the letter will reveal the forgery. If the inserted sheet is a typed matter, the fraud may exposed by the shape, size and design of the type. The typewriting may reveal that a different type of machine was used.

7. Overwriting

The overwriting may be genuine or fraudulent. Sometimes in order to correct a spelling mistake, to make writing or figures more legible or to correct/change some writing, the same writer may overwrite the strokes or lines. Such overwriting are generally made boldly and no attempt is made to conceal the overwritten or overwriting is the habit of a writer, the strokes are drawn carelessly. The fraudulent overwriting to change the contents of documents are usually made in a careful manner and every effort is made by the preparator to conceal such changes made by him. When the original writing instrument and/ or ink are not available, the preparator tries to match the colour of inks and nature of stroke. However, mostly

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he is not aware of the fact that the inks though of the same colour are always not the same and they may differ considerably in their dye composition.

7.1. Cases related to overwriting

Fraudulent overwriting are generally found in the following types of cases-

- (a) When figures or words are changed to raise their value. E.g. figure 1 to 7, fig 3 to 8, 6 to 16 etc. the preparator may also overwrite the remaining figure or word of the entry so that the tint of ink may appear the same and the difference of ink may not be detected.
- (b) When the entire writing or part of document are overwritten to conceal fraudulent additions made with the ink having different shade other than the original writing.
- (c) When a writer wants to disguise his signature or writing, he may overwrite letters to conceal their original writing.
- (d) When pencil or carbon outlines are converted to a traced forgery.
- (e) Sometimes overwriting is purposely done to make the original writing unfit for comparison or to conceal the original writing characteristics.

7.2. Examination of overwriting

Most of the overwriting can be detected by examining the document carefully under direct light, by oblique light and transmitted light to find out any overlapping and changed intensity of the strokes and under low power microscope to detect careful joining, traces of original ink beneath the overwritten stroke and for differentiating inks.

Sometimes an examination with UV rays, IR rays and colour filters may also prove useful for this purpose.

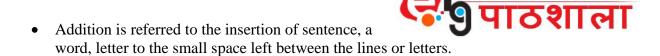
The examiner should never forget to examine the back of the document, because overwriting are usually made cautiously by applying heavy pen pressure causing embossing on the back of paper which may help a lot to reveal the truth.

8. Summary

- Any change to a document which gives it a different effect from that it originally possessed is known as alteration in documents.
- They can be classified in different categories such as addition/interlineations or overwriting.

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- Addition in the document can be performed in many ways, a sheet insertion is also a type of addition in which a new sheet in attached to the whole document.
- The fraudulent overwriting is done to change the contents of documents that are usually made in a careful manner.
- Overwriting in documents can be examined by oblique light or UV ray.

