

## Experiment No. 1: Categorization of cocoons.

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**Aim:** To categorize different types of cocoons.

**Introduction:** Generally every cocoon lot contains many types of defective cocoons like double, flimsy, melted, stained, urinated, *etc.* The production of such defective cocoons depending upon the method of rearing, climatic conditions during rearing and spinning, type of mountages, transportation of cocoons, handling of cocoons *etc.* The per cent age of these defective cocoons may occur to an extent of about 10 % of the lot.

These inferior cocoons are not suitable for economic reeling and also decreases the quality of silk yarn produced. Therefore, before reeling process these inferior cocoons should be sorted out and reeled separately.

**Requirements:** Cocoon lots, Blade, Balance, plastic containers, *etc.*,

### Procedure:

Categorization of the cocoons can be done in two methods.

1. By number
2. By weight

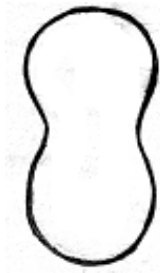
Based on the visual and tactile test, separate various types of cocoons by hand picking and record the number as well as weight of cocoons in each type. Then calculate the per cent age of each type by following formulae.

$$\begin{aligned} \text{Per cent age of particular} &= \frac{\text{Number of particular type of cocoon X 100}}{\text{Total number of cocoons}} \\ \text{type by number} & \\ &= \text{_____ \%} \end{aligned}$$

$$\begin{aligned} \text{Per cent age of particular} &= \frac{\text{Weight of particular type of cocoon X 100}}{\text{Total weight of cocoons}} \\ \text{type by weight} & \\ &= \text{_____ \%} \end{aligned}$$

**Report:** The give cocoon lot contains \_\_\_\_\_ and \_\_\_\_\_ % of defective cocoons by number and weight respectively.

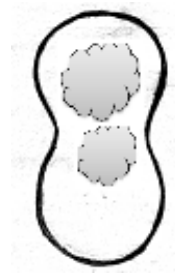
## General Appearance of Cocoons



Good Cocoon



Stained Cocoon



Urinated Cocoon



Uzi infested Cocoon



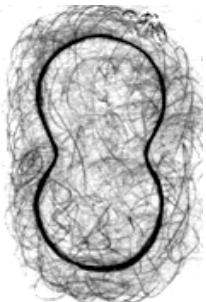
Moth emerged Cocoon



Melted Cocoon



Flimsy cocoon



Flossy Cocoon



Deformed Cocoon



Double Cocoon



Undersized Cocoon

**Observations and Calculations:**

Sl. No.	Type of cocoon	Number of cocoons	Percentage by number	Weight of cocoons (gm)	Percent age by weight
1	Good Cocoon				
2	Stained Cocoon				
3	Urinated Cocoon				
4	Uzi infested Cocoon				
5	Moth emerged Cocoon				
6	Melted Cocoon				
7	Flimsy cocoon				
8	Flossy Cocoon				
9	Thin end Cocoon				
10	Deformed Cocoon				
11	Double Cocoon				
12	Thin Shell Cocoon				
13	Undersized Cocoon				
	Total		----		----

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