



School of Pharmacy & Life Sciences

Campus BHUBANESWAR Batch : A₂

Code : DCPY1107 Subject : PHARMACEUTIC - I Date : 4/2/19

Applied and Action Learning

(Learning by doing and discovery)

Name of the Experiment : Quality control test for capsule

SKETCH

Aim of the experiment :-

To carry out the quality control test of the marketed hard gelatin capsule.

Material, Tools & Equipment Required (If any)

Sl.No.	Name	Specification	Qty.
	Chemical - Marketed hard gelatin capsule. Equipment - Electronic balance, disintegration test.		

PROCEDURE

Quality control test for marketed hard gelatin capsule are:-

1. weight variation test
2. Disintegration test

Observations, Calculations, Graph

Safety Precaution:

Application & Inference:

REPORT^o:-

The quality control test for given marketed hard gelatin capsule (Amoxicillin capsule I.P) was performed. The product passes the equality control test.

ASSESSMENT

MARKING PROCEDURE		Full Mark	Marks Obtained	Remarks
Accuracy & Process	Sketch	10		
	Sequence of Operation	10		
	Use of Tools & Equipment	10		
	Safety Observation	5		
Report	Observations, Calculations, Graph	25		
Inference		30		
Viva		10		
Total		100		

Signature of Faculty

Signature of Student: *BITTU - DEY*

Name: BITTU - DEY

Regn. No: 181517100038

* Procedure:-

Quality control test for marketed hard gelatin capsule are:-

(1) weight variation test

(2) Disintegration test

1. weight variation test

The capsule are weighed individually, Average weight is calculated the individual weight are compared with the Average weight. Not more than two of the individual weight deviates from the average weight by more than the % deviation shown in the given table and non-deviate by more than twice that the percentage.

Average wt of capsule	% Deviation
less than 300mg	± 10
300mg or more	± 7.5

Calculation:-

Total wt of 10 capsule = 6.86g

Average wt of capsule = 0.686g

capsule No	Individual No.	Deviation from average weight	% Deviation
1	0.71	+ 0.016	- 3.49
2	0.71	+ 0.006	- 3.49
3	0.69	+ 0.006	- 0.58
4	0.69	+ 0.006	- 0.58
5	0.67	- 0.0024	2.33
6	0.68	- 0.014	0.87
7	0.68	- 0.024	0.87
8	0.68	- 0.024	0.87
9	0.71	- 0.004	- 3.49
10	0.71	- 0.014	- 2.04

$$\% \text{ deviation} = \frac{\text{deviation}}{\text{Av. wt}} \times 100$$

Disintegration test

Test	Observation	Inference
<p>Water is placed in the disintegration apparatus. The temp of the med^m is maintained 37°C. Capsules are placed one in each of the 6 tubes of the basket. Then the plastic weights are placed over each capsule to prevent the capsule coming outside of the tubes of the basket. The basket allowed to operate.</p>	<p>Complete disintegration of all the 6 capsules.</p>	<p>Time required is <u>25 min</u></p>

no. of capsules disintegrated within 30 minutes. Batch of capsules passes does not pass the weight variation test.