## Contents

Lis	t of Figures	vii
Lis	t of Tables	ix
Preamble		xi
1.	Introduction	1
2.	How to Search for an Article	7
3.	Anatomy of a Typical Scientific Article	11
4.	A Brief Insight into How Scientific Articles Get Published in Journals	17
5.	The Introduction Section: Background Information on the Topic of Research Points to Look Out for in the Introduction	23 28
6.	More on the Introduction Section: Hypothesis or Question that the Authors were Investigating	33
	Issues to Consider Regarding the Hypothesis or	24
	Question	36
	<ul><li>a. Premise of the work</li><li>b. Logic of the work</li></ul>	36 38
	c. Novelty of the work	30 39
7.	The Materials and Methods Section: Reagents	
	and Techniques Used in the Study What is Important in the Materials and	43
	Methods Section?	47

v

8. The Results Section: What were the Important	
Observations Made?	51
Research Strategy Versus Individual Experiments	56
Critique of the Results	58
a. Coherence of data and description	59
b. Reliability of the data	61
i. Are the data reproducible?	61
ii. Is there consistency in the data?	64
c. Validity of the data	67
i. Was there proper use of controls?	67
ii. Are the findings validated using statistical	
analysis?	69
iii. Are experiments selected to answer the questions	
that the authors set out to investigate?	71
d. The approach used for the study	72
i. Strengths and weaknesses of the approach taken	72
ii. Suitability of the experiments	74
9. The Discussion Section:	
What were the Main Conclusion(s) Made	
by the Authors Arising from the Data?	77
Critique of the Conclusions	79
a. What were the significant points of the findings	
in the article?	79
b. Did the authors make the right conclusions based	
on their interpretation of their data?	81
c. Did the data answer the questions/hypothesis	~ ~
raised by the authors?	82
10. What are Your Views on the Article?	85
11. Writing Activities Related to Critiquing an Article	89
12. Final Words	95
Bibliography	99
Index	101