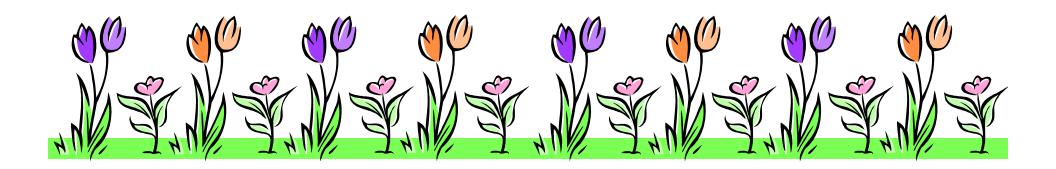
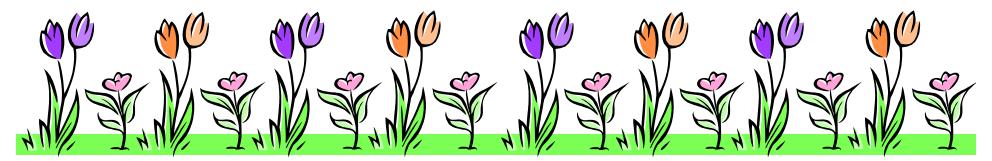


FORMULATION OF HYPOTHESIS

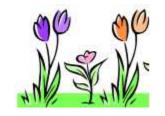
N S VISWANATH



- $2. \rightarrow Sun rises in the East.$
 - \rightarrow Moon rises in the West.
 - → Magnetic Needle faces North.
 - \rightarrow Five basic elements are required for living:
 - a. Air
 - b. Water
 - c. Fire
 - d. Sun
 - e. Earth
 - \rightarrow Inner happiness is all enduring.



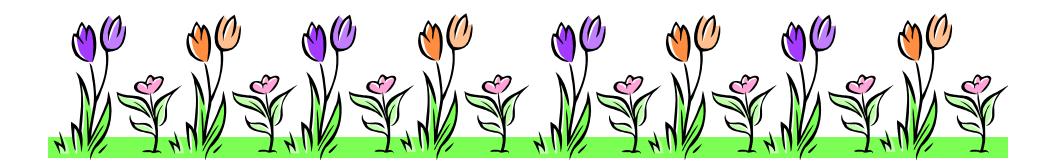


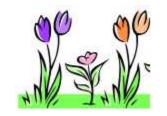


3. Natural Laws cannot be changed; from

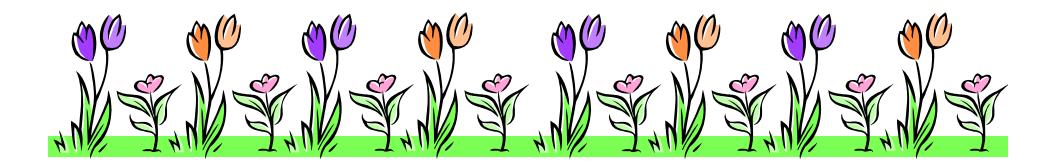
Nature. Social Laws require to be changed;

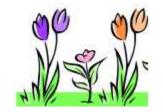
evolved in a context.



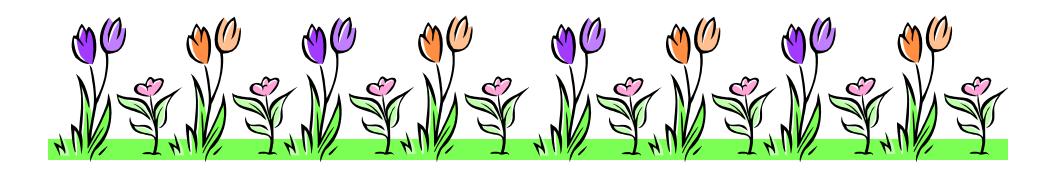


4. Uncertainty in any sphere needs an examination. Statements are made which include uncertainty.

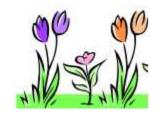




5. Leadership influences change.

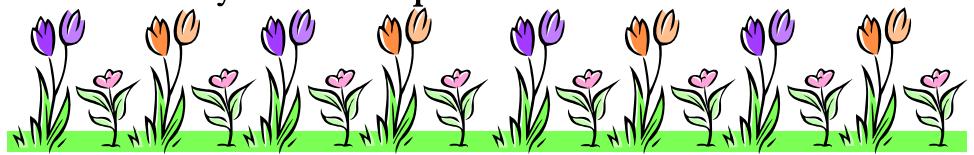


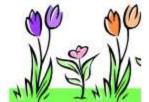
6. a. What type of Leadership?



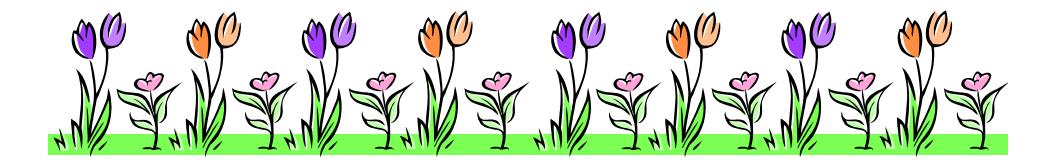
- b. Where such Leadership?
- c. When it existed?
- d. What for it emerged?
- e. How Leadership can bring in change?

f. Why Leadership?



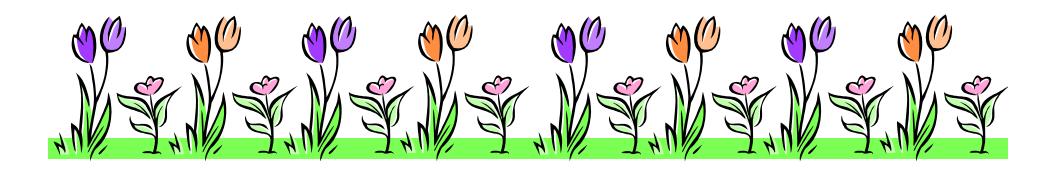


- 7. a. Type Status quo, change, transformation, reformatory, revolutionary, dictatorship, command, transparent, opaque, stable / unstable, regulatory.....
 - b. Which place? In what context?
 - c. At what time?
 - d. Back drop? Reasons influencing such type?
 - e. The process? The Institution? The people?
 - f. Do we need it? Why?





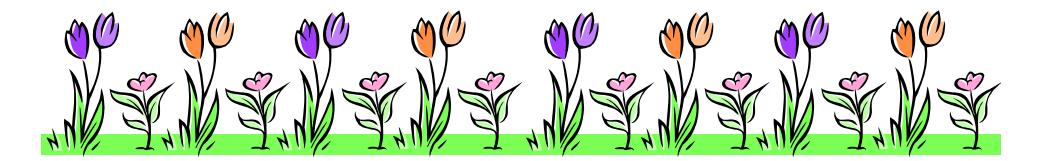
8. Research questions are documented in the form of Statement which requires an examination.



9. How these statements or problem statements are generated?

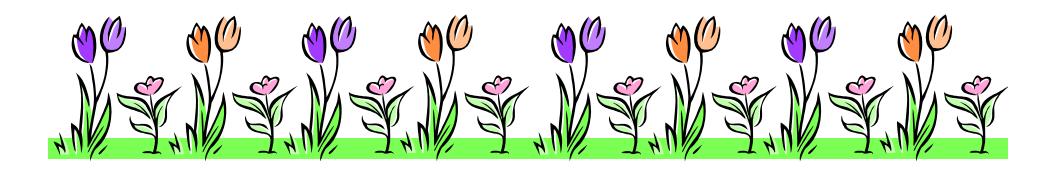


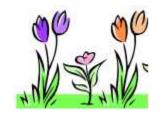
- Previous Statements.
- Triggered Interest.
- Potential Problem Fields.
- Existing / being Experienced.
- Intrapersonal / Outward.





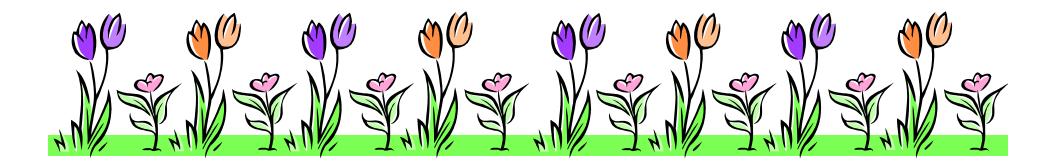
10. Search, Explore and gather evidence(s).

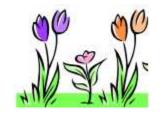




11. A Hypothesis is an:

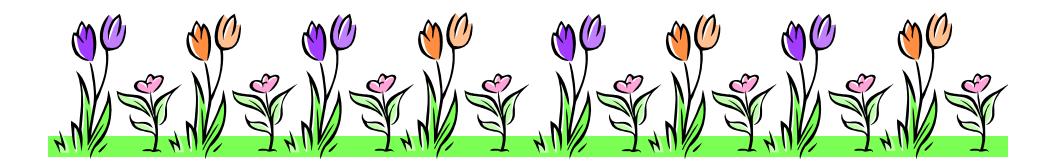
- Educated guess / hunch.
- Conjecture.
- Formal statement on expected relationship.
- Form of relationship between a set of independent variables & a dependent variable

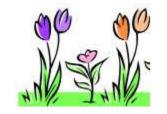




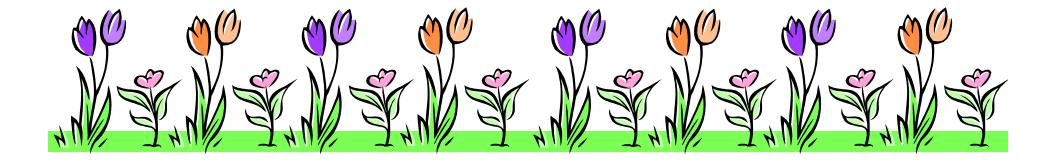
12. and a dependent variable:

- Between predictors and predictand.
- Between regressor and regressand.
- A research question is essentially hypothesis.



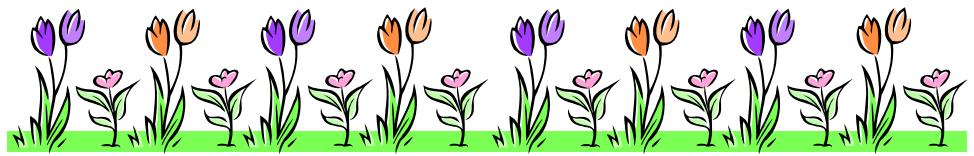


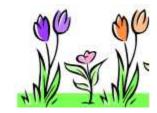
- 13. A tentative prediction on the nature of relationship.
 - A tentative explosion of a research problem.
 - A declarative sentence.
 - A statement or explanation suggested by explanation not proved or yet to be proved.



14. Nature of Hypothesis:

- A clear statement veracity of which to be tasted.
- It helps draw research objectives.
- It helps to identify key abstract concepts involved in research.
- Links up between problem statement and literature review.
- A tool for advancement of knowledge.
- Consistent with existing knowledge.
- Facilitates further enquiry.

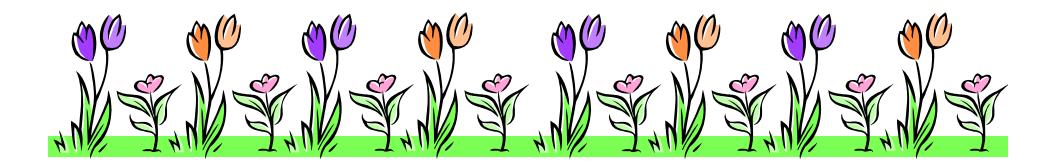






15. - It can be be tested.

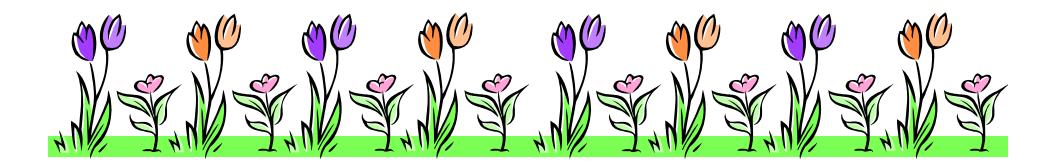
- Not moral or ethical questions.
- Neither two specific nor two general.
- Helps predict consequences or implications.
- Valuable when either proved or not proved.

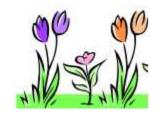




16. Type of Hypothesis.

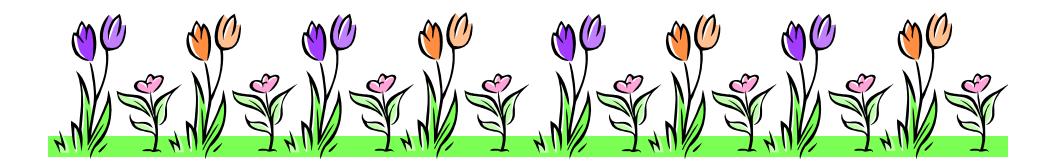
- Null.
- Alternate.
- Alternatives.

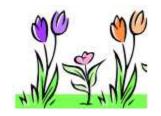




17. Formulation of Hypothesis:

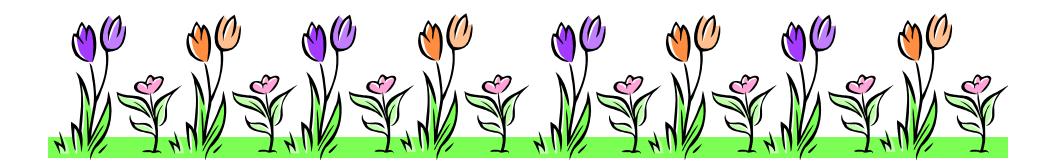
- Qualitative
- Quantitative

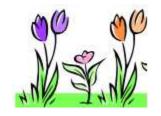




18. Generated by

- Deduction / Deductive reasoning.
- Induction / Inductive reasoning.

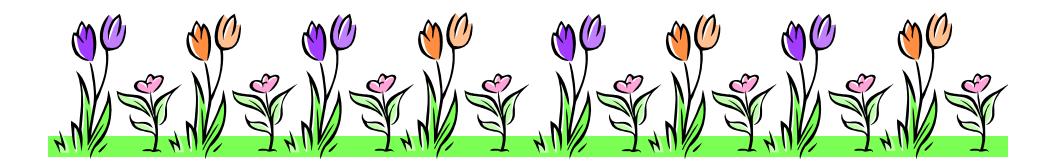


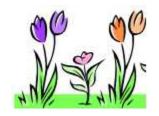


19. Deduction Process

- Observation \rightarrow Pattern \rightarrow Tentative Hypothesis

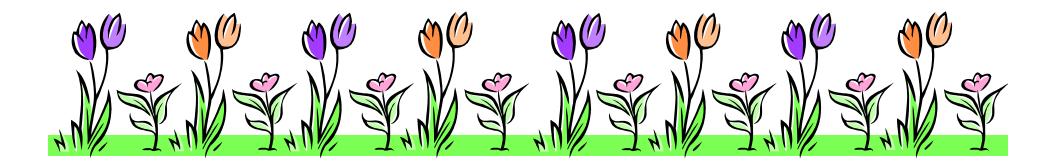
 \rightarrow Theory \rightarrow Description / Quantitative.





20. Induction Process

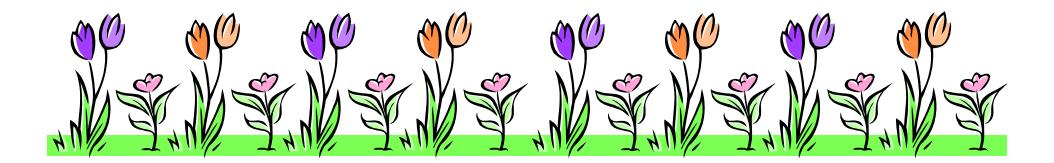
- Theory → Hypothesis → Observation →
 Confirmation → Description / Quantitative.
- Induction / Inductive reasoning.



21. Qualitative Approach



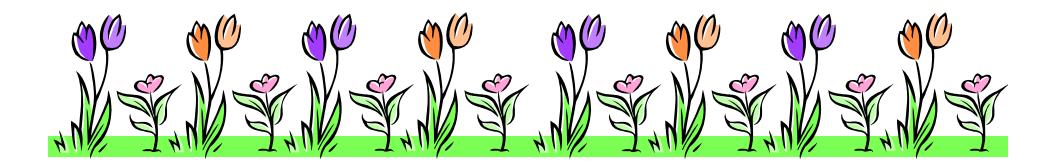
- Use Words / Phrases to know whether the study discovers, seeks to learn, explores, describes.
- Non directional words.
- Examine whether the questions are under continual services.
- Open ended.
- Focus on the theme.



22. – Understand the phenomenon to be researched.



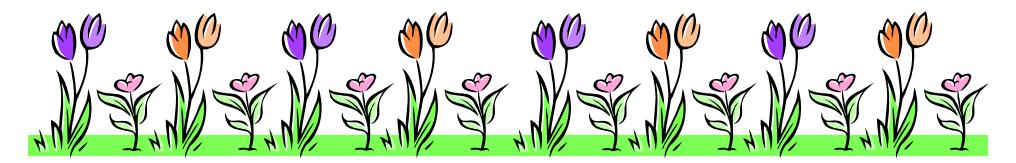
- Object of research is professional.
- Examine the phenomenon from an holistic perspective.
- Collect or gather relevant information.



23. Quantitative Approach

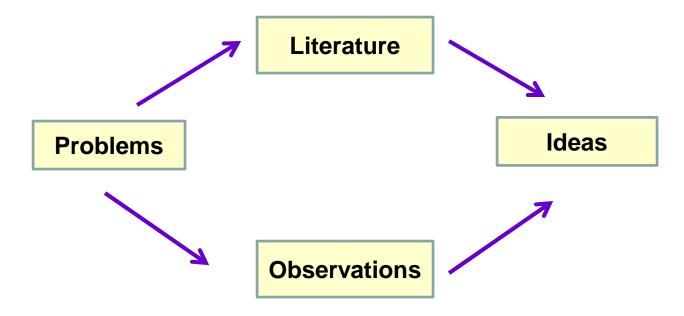


- Comparison between variables.
- Relationship between variables.
- Testable proposition.
- Measurement problems to be attended to
- Do not combine questions, objectives and hypotheses.
- Define the target group.

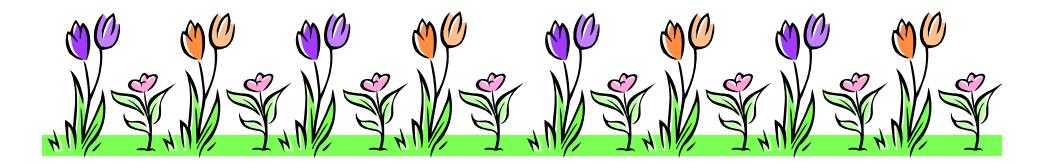


24. Generation Process:



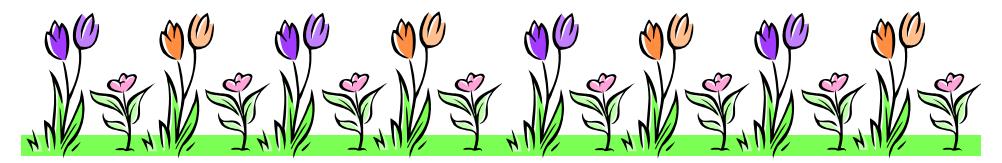


- \rightarrow Operation Definitions \rightarrow
- \rightarrow Construct \rightarrow Hypothesis



25. Testing -

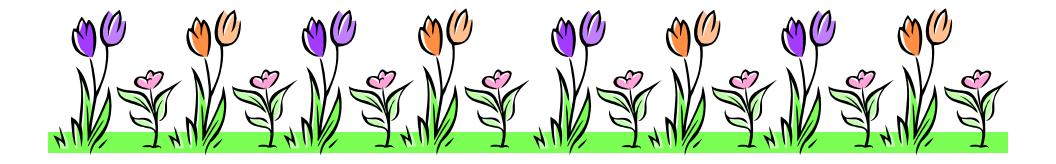
- To verify
- & to justify
- To refuse
- To validate
- To rectify
- To repeat
- To falsify

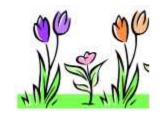


26. Errors in Hypothesis



	Reality		
		Yes	No
Nature	Yes	O.K	I Error
	No	II Error	O.K

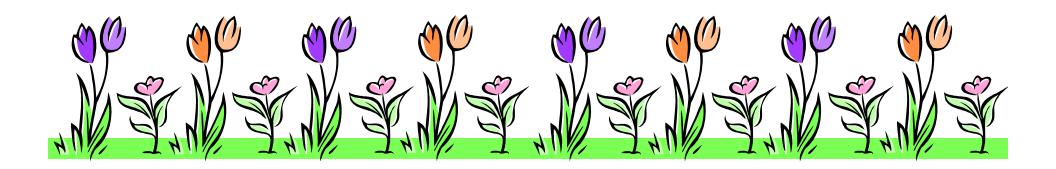


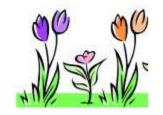


27. Awareness about seriousness of type I and

II errors.

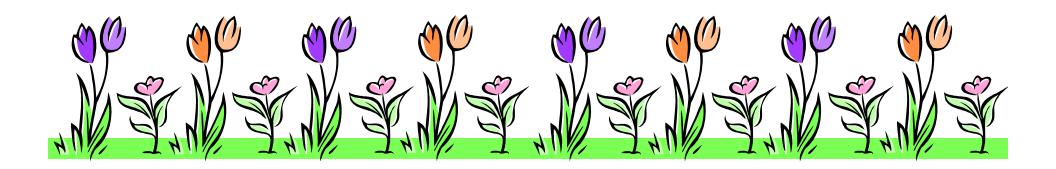
Minimize I and II.





28. Error free testing can be attempted by

fixing type I or type II errors.







Thank You!

