# Chapter 2 – Scientific Investigation

1. Confidence as a characteristic of scientific investigation refers to:

\*a. The probability that our estimations are correct.

b. The idea that a simple model that explains a certain phenomenon has preference over a complex model.

c. The fact that findings are generalizable.

d. The fact that an investigation has a clear theoretical foundation.

2. Logically speaking inductive research comes before deductive research.

\*a. T

b. F

3. Scientific investigation is characterized by a good theoretical base and a sound methodological design. These characteristics are both related to the of the investigation.

What must be filled on the line?

\*a. Rigor.

b. Precision and confidence.

c. Objectivity.

d. Parsimony.

4. A deductive investigation is aimed at testing hypothesis.

\*a. T

b. F

5. If a manager simply wants to know how satisfied employees are with their jobs, and thus simply wants to *describe* a phenomenon (job satisfaction), hypothesis testing is irrelevant.

a. T\*

b. F

6. In the hypothetico-deductive research method, hypotheses play an important role.

\*a. T

b. F

7. Epistemology is concerned with the nature of knowledge or how we come to know.

\*a. T

b. F

8. Positivists believe that the world (as we know it!) is mentally constructed.

a. T

\*b. F

9. Constructionists are often more concerned with understanding a specific case than with the generalization of their findings.

\*a. T

b. F

10.Critical realistm does not take on a particular position on what makes good research.

a. T

\*b. F

11. The focus of pragmatism is on basic, fundamental research

a. T

\*b. F

12. Pragmatism is a combination of the belief in an external reality with the rejection of the claim that this external reality can be objectively measured.

a. T

\*b. F

13. Knowledge of epistemology may help you to relate to and understand the research of others and the choices that were made in this research.

\*a. T

b. F

14. Different researchers have different ideas about the nature of knowledge or on how we come to know.

\*a. T

b. F

15. Although the scientific method has laid the foundation for many great discoveries in the past and the present it is not *necessarily* the most suitable method in an *applied* research context.

\*a. T

b. F

16. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ does not necessarily apply when research is aimed at solving a specific problem in a work setting.

a. Rigor.

\*b. Generalizability.

c. Objectivity.

d. Purposivness.

17. ‘Precision’ related to scientific investigation refers amongst others to:

a. The probability that our estimations are correct.

b. The idea that a simple model that explains a certain phenomenon has preference over a complex model.

\*c. The closeness of the findings to “reality” based on a sample.

d. The fact that a study has a good theoretical base.

18. ‘Parsimony’ as a characteristic of scientific investigation refers to:

a. The probability that our estimations are correct.

\*b. The idea that a simple model that explains a certain phenomenon has preference over a complex model.

c. The fact that findings are generalizable.

d. The fact that an investigation has a clear theoretical foundation.

19. Which of the following characteristics are both related to the rigor of an investigation?

\*a. A good theoretical base and a sound methodological design.

b. Precision and confidence.

c. Objectivity and parsimony.

d. Induction and deduction.

20. A deductive investigation starts with an observation of empirical data.

a. T

\*b. F

21. Case studies involve in-depth, contextual analyses of similar situations in other organizations, where the nature and definition of the problem happen to be the same as experienced in the current situation.

\*a. T

b. F

22. Case studies play an important role in the hypothetico-deductive method.

a. T

\*b. F

23. Objectivity refers to the closeness of the findings to “reality” based on a sample.

a. T

\*b. F

24. It is imperative to meet all the hallmarks of science in full even though comparability, consistency, and wide generalizability are often difficult to obtain in research.

a. T

\*b. F

25. Theory testing (deduction) is an essential part of the research process whereas theory generation (induction) is not.

a. T

\*b. F

26. The action research methodology is most appropriate while effecting planned changes.

\*a. T

b. F

27. Action research is a constantly evolving project with interplay among problem, solution, effects or consequences, and new solution.

\*a. T

b. F

28. Hypothesis testing is deductive in nature because we test if a general theory is capable of explaining a particular problem.

\*a. T

b. F

29. Ontology is concerned with the nature of knowledge or how we come to know.

a. T

\*b. F

30. For a positivist, the world operates by laws of cause and effect that we can discern if we use a *scientific approach* to research.

\*a. T

b. F

31. The key approach of positivist researchers is observation.

a. T

\*b. F

32. Constructionism criticizes the positivist belief that the truth is subjective.

a. T

\*b. F

33. Constructionism studies the accounts people give of issues and topics and how people get to these accounts.

\*a. T

b. F

34. The critical realist believes that researchers are inherently biased.

\*a. T

b. F

35. Pragmatists see theories and concepts as important tools for finding our way in the world that surrounds us.

\*a. T

b. F

36. Your viewpoint on the nature of knowledge and on how we come to know will have a strong influence on the research questions you ask, your research design, and the research methods you will use.

\*a. T

b. F