1. **What is a construct? Give some examples of marketing research constructs.**

A construct is an abstract variable that is not directly observed, but is instead inferred from its component measurements. If a feature of something can be directly measured using physical instruments, such as height or weight of a person, then the variable is not a construct. Marketing examples include Brand Loyalty, Customer Satisfaction and Service Quality. Constructs can be complex with many different facets or dimensions. For example, Service Quality includes the listening skill of the service provider, ability to address the consumer's needs, and knowledge of the service provider.

2. **Define and provide an example of an operational definitions of a constructs.**

Constructs, such as Customer Satisfaction, are abstractions. An operational definition defines a construct by specifying the procedures used to measure a construct, such as with survey items, usually multiple items. For example, overall Satisfaction can be assessed by administering an item that evaluates Satisfaction, but also related items such as Desire to Purchase Again and Recommend to a Friend.

3. **Differentiate between the four types of measurement scales, and discuss the types of information contained in each.** [Answering this question is longer than the typical question as it requires briefly defining 4 different measurement scales.]

Nominal measures only indicate categorical data. Ordinal measures can be used to assign respondents into unique groups and to determine relative levels of magnitude of some characteristic of interest. They can assess greater than/less than. Interval measures can assign respondents into groups, can determine the relative level of magnitude of some characteristic of interest, and can measure the absolute difference between points on the measures. Researchers can not only establish the hierarchical order in the data, but also specific differences in the magnitude of the data points. Ratio measures have an absolute zero point.

4. **How does reliability differ from validity? Give examples of each.**

Reliability refers to the consistence of the measurement device. For example, if you weighed yourself on your bathroom scale, and the scale reported 150lbs, and then you step off and then weigh yourself again and get 170lbs, the scale would be unreliable. Same concept applies to survey items. Validity refers to the desired attribute being measured. Items on a survey should measure what they are intended to measure.

5. **What is test-retest reliability?**

Test-retest reliability is the form of reliability that measures consistency over time. Give a group of people a survey, wait a few days so that there is not perfect memory of their responses, then re-administer the same survey. The survey has high test-retest reliability of their responses to the same items at two different times correlate highly.