

GER1000 2018 Sem 2

Quiz 5 and solutions

1. A sampling frame should be _____ the target population so as to not lose generalisability of the results from the sample to the population.

- i. equal to
- ii. smaller than
- iii. larger than

- a. (i) only.
- b. (ii) only.
- c. (iii) only.
- d. (i) or (ii).
- e. (i) or (iii).

Ans: E. Sampling frame chosen should be equal to or larger than the target population to achieve good coverage. (Chapter 4 Slide 17)

2. Sherry wants to find out what is the average time NUS students spend on watching YouTube videos.

By sampling more subjects, she will reduce the systematic error of her estimate.

The statement in bold is _____.

- a. true
- b. false

Ans: B. The random error of the estimate could be reduced with a larger sample size, not the systematic error. (Chapter 4 Slide 78)

3. "Probability sampling is preferred over non-probability sampling as it will ensure that each sampling unit in the frame has equal probability to be selected."

The above statement is _____.

- a. true
- b. false

Ans: B. Probability sampling scheme need not mean each sampling unit has equal probability to be selected but only that the probability of selection can be computed. (Chapter 4 Slide 21)

4. Cory wants to find out what is the average time GER1000 students spend on watching YouTube videos. He obtained the list of email addresses of all students enrolled in GER1000 from the module coordinator, then sent a questionnaire to every address in the list. Mary commented that Cory is conducting a census. Mary's conclusion is ____?

- a) true
- b) false

Ans: A. A census attempts to survey every unit in the target population. (Chapter 4 Slide 8)

5. Martin conducted a survey using a multistage sampling plan to find out what is the average time NUS students spend on watching YouTube videos. In the first stage, he randomly selected 20 modules. In the second stage, he requested the respective module coordinators to get volunteers from their classes to participate in the survey. This is a ____ sampling scheme.

- a) probability
- b) non-probability

Ans: B. With the non-probability sampling component in the multistage sampling scheme, it becomes impossible to compute the sampling probability of each sampling unit, hence this is a non-probability sampling scheme. (Chapter 4 Slide 34)