Problem 1

To research HMSM students you decide to position yourself at the entry to the refresh and ask random students if they want to participate in your survey. Once you have surveyed 50 students you decide to call it a day,

A: This sample is random because students were chosen randomly

B: This sample is random because all HMSM students have an equal likelihood to end up in my sample

C: This sample is not random because not all HMSM students have an equal likelihood of ending up in the sample

D: The sample is not random because all HMSM students have an equal likelihood of ending up in the sample

Problem 2

Have another look at the sample in problem 1.

A: The sample is probably not representative concerning the variable “students is doing internship abroad”

B: The sample is probably representative concerning the variable “student is doing internship abroad”

Problem 3

An Excel spreadsheet containing email addresses of 1100 HMSM students is obtained. Each email address is assigned a number and we generate 50 random number in excel between 1 and 1100. Students whose number has been drawn by our Excel calculations receive an email.

A: This sample is not random because students were selected by Excel

B: This sample is random because all students have an equal likelihood of ending up in the sample

C: This sample is not random because not all students have an equal likelihood of ending up in the sample

D: This sample is not random because all students have an equal likelihood of ending up in the sample

Problem 4

You ask soccer players at the soccer field on Sunday morning to participate in your survey on hobbies in young people. Which group of people will be over represented?

A: Young people sleeping in after a night out

B: Young people who do not workout on Sunday due to religious reasons

C: Young people who practice a different sport then soccer

D: Young people who play soccer

Problem 5

Consider a phone book with 1000 pages. Using Excel I generate a random number between 1 and 10: say the number 7. In a list I note down the first phone number I find on page 7. Subsequently I note down the first phone number on page 17, 27, 37, ..., 997. This results in a list of 100 phone number for my sample. From the population of telephone subscribers in the phone book this is a ...

A: single random sample

B: systematic sample with a random start

C: clustered sample

D: stratified sample

Problem 6

Given is a phone book containing 100 000 numbered subscribers. Using Excel I generate 100 random numbers in the range of 1 and 100 000. For all these numbers I will look up the corresponding subscriber. This results in 100 phone numbers for my sample. From the population of telephone subscribers in this phone book this is a ...

A: Random sample

B: A systematic sample with a random start

C: A clustered sample

D: A stratified sample

Problem 7

In the Netherlands almost 440 000 different postal codes exist. A complete postal code consist of 6 characters and comprises of on average 17 addresses or 'delivery hubs'. Using Excel I generate 100 random numbers in the range of 1 and 440 000. From the list of postal codes I select 100 postal codes. Subsequently I visit all ± 17 addresses within the postal code, ring the bell and ask the inhabitants if they want to participate in my experiment. This is a ...

A: Random sample

B: systematic sample with a random start

C: clustered sample

D: stratified sample

Problem 8

I approach a friend who has recently given birth and ask whether she want to participate in a study on postnatal depression. After the interview I ask her whether she knows more people who have recently given birth. Upon which she gives me the address of the owner of a pregnancy centre. I approach this person, conduct the interview after which I ask here the same question. This is a ...

A: Quota sample

B: Self selection

C: Convenience sample

D: A sample drawn by the snowball method

Problem 9

To research HMSM students you decide to position yourself at the entry to the refresh and ask random students if they want to participate in your survey. Once you have surveyed enough students you decide to call it a day, this is a ….

A: Quota sample

B: Self selection

C: Convenience sample

D: Snowball sample

Problem 10

If a sample in a number of relevant features resembles the population then your sample is representative and it is possible to generalize research results. This is called:

A: Internal validity

B: External validity

C: Construct validity