

Chapter 2 Exam Review

MDM4U

Jensen

SOLUTIONS

1. State the type of question that has the respondent list the options in order from most important to least

- a) important.
- b) rating
- c) checklist
- d) open
- e) information
- f) ranking

2. State the type of bias that occurs when the chosen sample does not accurately represent the population.

- a) household
- b) response
- c) non-response
- d) sampling ~~error~~

3. State the type of question that has respondents reply in their own words.

- a) open
- b) rating
- c) ranking
- d) closed
- e) information
- f) checklist

4. State the type of random sampling that requires all selections and combinations of selections are equally likely. This type of sampling may not end up being representative of the population, but any deviations are due only to chance.

- a) stratified
- b) multi-stage
- c) simple
- d) clustered
- e) systematic

5. A study that considers individuals from different groups at the same time is called:

- a) longitudinal
- b) cross-sectional
- c) census
- d) time series

6. Variables that can not be measured numerically are called:

- a) quantitative
- b) discrete
- c) continuous
- d) qualitative

7. Refers to the entire group that is the focus of the study.

- a) population
- b) sample
- c) census
- d) longitudinal

8. State the type of random sampling that requires that the population be organized into groups. Randomly groups are chosen and all members in the chosen groups are surveyed.

- a) stratified
- b) multi-stage
- c) simple
- d) clustered
- e) systematic

9. State the type of question that asks the respondent about his/her gender and/or age.

- a) rating
- b) ranking
- c) open
- d) information
- e) checklist

10. State the type of random sampling that divides the population into groups. Then a simple random sample of the members of each group is taken. The size of the sample for each group is proportionate to the group's size.

- a) stratified
- b) multi-stage
- c) simple
- d) clustered
- e) systematic

11. Data that are measured using an infinite set of real numbers.

- a) quantitative
- b) discrete
- c) continuous
- d) qualitative

12. State the type of question that asks the respondent how satisfied he/she was with a particular event.

- a) rating
- b) ranking
- c) open
- d) information
- e) checklist

13. State the type of question that asks the respondent to place an "x" in as many boxes as it applies to him/her.

- a) rating
- b) ranking
- c) open
- d) information
- e) checklist

14. State the type of random sampling that is used when you are sampling a fixed percent of the population. A random starting point is chosen and then you select every n th individual for your study where n is the sampling interval.

- a) stratified
- b) multi-stage
- c) simple
- d) clustered
- e) systematic

15. Data that is collected from other sources is called:

- a) primary
- b) secondary
- c) continuous
- d) discrete
- e) quantitative

16. State the type of question that gives the respondents a limited number of responses from which to choose.

- a) closed
- b) rating
- c) ranking
- d) open
- e) information
- f) checklist

17. State the type of random sampling that requires that the population be organized into groups. A random sample of groups is chosen and then a random sample of the members of the chosen groups is taken.

- a) stratified
- b) multi-stage
- c) simple
- d) clustered
- e) systematic

18. Data that is collected by the researcher is called:

- a) primary
- b) secondary
- c) continuous
- d) discrete
- e) quantitative

19. State the type of study that considers individuals over a long period of time.

- a) longitudinal
- b) cross-sectional
- c) census
- d) time series

20. Information gathered from the entire population is called a:

- a) population
- b) sample
- c) census
- d) longitudinal

21. Variables that can be measured numerically.

- a) quantitative
- b) discrete
- c) continuous
- d) qualitative

22. State the type of bias that occurs when factors in the surveying method influence the result (i.e. poor question design, extraneous information, interviewer tone or attitude)

- a) sampling
- b) response
- c) non-response
- d) household
- e) discrete

23. State the type of bias that occurs when one type of respondent is over represented because groupings of different sizes are polled equally.

- a) sampling
- b) response
- c) non-response
- d) household
- e) discrete

24. Refers to part of a population selected so as to gain information about the whole population.

- a) population
- b) sample
- c) census
- d) longitudinal

25. State the type of bias that occurs when the results are influenced because surveys are not returned.

- a) sampling
- b) response
- c) non-response
- d) household discrete

26. State the type of bias that occurs when the chosen sample does not represent the population.

- a) sampling
- b) response
- c) non-response
- d) household
- e) discrete

27. Identify the type of bias that might result from each of the following data collection methods.

a) A survey designed to see which extra curricular activity should get more funding is given to the King's Christian Collegiate hockey team. All surveys are collected at the end of practice and all members were present.

Which extra-curricular activity do you consider to be the best? Circle only one.

Ceramics **Hockey** Photography Strings Ensemble Tennis

- Sampling bias - the hockey team does not represent all of the King's students.
- response bias - "Hockey" being bigger than the other options may influence the results.

b) A survey is given to 50 male and 50 female students at KCC regarding cell phones in the school. All surveys are collected. There are 310 female students and 250 male students that go to KCC students.

- Household bias - males are over represented. An equal percent of each group should be surveyed, not an equal number.

c) A survey is sent home with all students for parents to complete regarding the usage of ipod and mp3 players in the school. The students are to return the survey the following day.

- Non-response - not all surveys will be returned.

d) Mr. Bulthuis conducts 1 on 1 interviews with students at King's to see if they think physical education is important enough to make it mandatory to take each year in high school.

- Response-bias - student's may be afraid to give their honest opinion about physical education to the athletic director of the school.

28. Identify which sampling method is being used.

a) The student parliament Prime Minister decides to survey the KCC student body. Students are organized into groups by grade and then two groups are randomly chosen and all the students in the chosen groups are surveyed.

Cluster

b) Mr. Jensen decides to survey students about their Mathematical interests. He puts all the students' names in a box and randomly selects 200 names.

Simple Random

c) The guidance counsellors decide to survey a fixed percent of the grade 9 student body to find out if they have had a positive experience in the first year at KCC. They randomly select a starting point and then they select every 12th grade 9 student on an alphabetized attendance roster to be surveyed.

Systematic

d) Mr. DeBoer groups the students by homeroom. He randomly selects 10 of the groups and then randomly selects people from each selected group to be surveyed.

Multi-Stage

e) Mr. Lee decides to survey students at KCC. He divides the students into groups according to their homeroom. Then a simple random sample of the students in each group is taken. The size of the sample for each group is proportionate to the group's size.

Stratified

29. Identify the type of question being used in each of the following situations. Each type may only be used once.

i) How satisfied are you with the uniform pieces at KCC?

___ very satisfied ___ satisfied ___ dissatisfied ___ very dissatisfied

Rating

b) Do you think all students, from grade 9 through to grade 12, should be able to run for a position on the student parliament? Why?

Open

c) Check the appropriate response.

Gender: ___ female ___ male

Information

d) Which courses are you presently taking this semester? Check as many as apply.

___ Chemistry ___ Drama ___ English ___ Mathematics ___ Physics

Checklist

) Do you think students should be allowed to use a cell phone at school? Check the most appropriate response.

___ No ___ Yes

Closed.

f) Below is a list of current and previous Prime Ministers of Canada. Please rank them in order of performance in the Prime Minister's position from 1 (excellent) to 4 (not impressed).

___ Mr. Chetian ___ Mr. Harper ___ Mr. Mulroney ___ Mr. Trudeau

Ranking

30. List the four criterion for what good questions are:

- Simple
- Relevant
- Specific
- Readable.

31. List the five things that good questions avoid:

- Jargon
- Abbreviations
- Negatives
- Leading Respondents
- Insensitivity

32. Explain why each question is not considered a good question. Be very specific.

a) Circle one NHL player that you think should make the All-Star team. Keep in mind that Sidney Crosby is currently leading the league in points.

Sidney Crosby James Reimer Dion Phaneuf Nazem Kadri David Clarkson

- Abbreviation - NHL
- Leading respondent - Information about Crosby is not necessary.

b) Mr. Hammond asked graduating students if they are not interested in receiving a University information package from U of T?

Negative - the word 'not' makes it confusing.

Abbreviation - "U of T"