Seminar 2

1. Those methods involving the collection, presentation, and characterisation of a set of data in order to properly describe the various features of that set of data are called
   (a) inferential statistics.
   (b) the scientific method.
   (c) sampling.
   (d) descriptive statistics.

2. Which of the following reflect the need for statistical sampling?
   (a) It is too costly to deal with the complete population.
   (b) It is too difficult to deal with the complete population.
   (c) It is too time consuming to deal with the complete population.
   (d) All of the above.

3. The use of the results of a political poll is an example of
   (a) inferential statistics.
   (b) descriptive statistics.
   (c) a parameter.
   (d) a statistics.

4. An examination of the socio-economic and physical characteristics of the employees of a particular firm is an example of
   (a) inferential statistics.
   (b) descriptive statistics.
   (c) a parameter.
   (d) a statistics.

5. The universe or "totality of items of things" under consideration is called
   (a) a sample
   (b) a population.
   (c) a parameter.
   (d) a statistics.

6. The portion of the universe that has been selected for analysis is called
   (a) a sample
   (b) a population.
   (c) a parameter.
   (d) a statistics.

7. A summary measure that is computed to describe a characteristics from only a sample of the population is called
   (a) a parameter.
   (b) the random generator.
   (c) a statistics.
   (d) the scientific method.

Seminar 2 (cont.)

8. A summary measure that is computed to describe a characteristics of an entire population is called
   (a) a parameter.
   (b) the random generator.
   (c) a statistics.
   (d) the scientific method.

9. The increased use of statistical methods in recent years is *primarily* due to
   (a) scientific exploration.
   (b) mathematical inquisitiveness.
   (c) an increased interest in gambling.
   (d) the accessibility of computers.

10. Statistics can be defined as:
   (a) a technique in which numbers are used to prove anything to anybody.
   (b) the science that gives credence to congressional decision.
   (c) a college course designed to weed out marginal students.
   (d) the science that deals with collecting, analyzing, and interpreting data.

11. By making generalisations about a larger group based on the results of a smaller sample taken from that group, one enters into the realm of
   (a) Descriptive statistics.
   (b) Population statistics.
   (c) Inferential statistics.
   (d) Theoretical statistics.

12. When making a decision using inferential statistics,
   (a) you are absolutely sure that the correct decision will be made.
   (b) the conclusion is correct only for the items in the sample.
   (c) you have no control over the risk of reaching an incorrect conclusion.
   (d) you realise that there is some chance that an incorrect decision could be made, but you have some control over the probability of that happening.

13. The process of using sample statistics to draw conclusions about the true population parameters is called
   (a) inferential statistics.
   (b) the scientific method.
   (c) sampling.
   (d) descriptive statistics.

Seminar 2 (cont.)

A data set is complied for all students in your BIA class. For each student, the following are recorded:

(a) hometown (b) gender (c) height (d) weight
(e) left or right handed (f) amount of money currently holding
(g) quality point average so far in the college
(h) date of birth (i) previous education level

14. Which of the above data are qualitative?

15. Which of the above data are quantitative?

16. Which of the above data are in nominal level?

17. Which of the above data are in ordinal level?

18. Which of the above data are in interval level?

19. Which of the above data are in ratio level?

20. A study is performed in which a randomly selected half of the students are taught by the professor and the other half are taught by a computer programme. This study is
    (a) Observational.
    (b) Experimental.

21. The management of a large corporation (3,000 employees) took a random sample of 100 employees to ascertain their opinion of a new four-day workweek proposal. They found that 55 of the employees sampled favoured the four-day plan. Management can correctly assume that the true proportion of all 3,000 employees who favour the four-day workweek is
    (a) 55%.
    (b) likely to be greater than 70%.
    (c) somewhere in the vicinity of 55%.
    (d) no assumptions can be made.

22. When a firm test-markets a product, is the firm involved in a descriptive statistics problem or an inferential statistics problem? Why?