

**Bachelor of Business Administration  
Annual Examinations – 2006**

**Paper BBAD – 203  
Business Statistics**

Time allowed: Three hours

Maximum Marks: 100

**SECTION – I**

Marks

Q1. Fill in the blanks

1X20=20

Attempt all questions. All questions carry equal marks.

- i) A statistical investigation is a process of collection and \_\_\_\_\_.
- ii) A real population is one in \_\_\_\_\_.
- iii) The main objective of collection and analysis of sample information is to reveal \_\_\_\_\_.
- iv) A questionnaire or a Schdule is a list of \_\_\_\_\_.
- v) A discrete variable can assume only some specific \_\_\_\_\_.
- vi) Sliding bar diagrams are \_\_\_\_\_.
- vii) A histogram is a graph of a frequency \_\_\_\_\_.
- viii) A properly constructed graph may \_\_\_\_\_.
- ix) Arithmetic mean is defined as \_\_\_\_\_.
- x) Median of a distribution is \_\_\_\_\_.
- xi) A measure of central tendency summarises \_\_\_\_\_.
- xii) Various measures of dispersion can be \_\_\_\_\_.
- xiii) The moments  $\mu_0, \mu_1, \mu_2, \dots$  etc are also known as \_\_\_\_\_.
- xiv) Correlation is an analysis of \_\_\_\_\_.
- xv) The term 'Regression', originated from \_\_\_\_\_.
- xvi) An index number is a device for comparing \_\_\_\_\_.
- xvii) The analysis of time series implies \_\_\_\_\_.
- xviii) The coefficient of colligation is \_\_\_\_\_.
- xix) The fitting of a distribution to given data implies \_\_\_\_\_.
- xx) Random sampling means \_\_\_\_\_.

**SECTION – II**

Answer any six of the following questions in about 75-100 words each. Each question carries five marks.

5X6=30

Q1. Give the meaning and definition of statistics.

Q2. How do you see statistics as data and statistics as science?

Q3. Discuss the significance and scope of the study of statistics.

Q4. Distinguish between population and sample.

Q5. Explain the non – random sampling methods.

Q6. What do you know about Histogram, Frequency Polygon, and Frequency Curve?

Q7. The heights of 15 students of a class were noted as shown below. Compute the Arithmetic Mean by using the Direct Method as well as Short – Cut Method.

S.NO.	Ht (cms)
1	160
2	167
3	174
4	158
5	155
6	171
7	162
8	152
9	156
10	175
11	178
12	167
13	177
14	162
15	153

Q8. A bag contains three red balls, four black balls, and three golden balls. One ball is to be drawn at random from the bag. What is the probability of picking (i) red ball (ii) black ball (iii) green ball?

### SECTION – III

Attempt any five of the following questions in about 300-400 words each. Each question carries ten marks. 5X10=50

Q1. Discuss the functions and importance of statistics in detail.

Q2. What do you understand by a random sampling method? Explain various methods of drawing a random sample.

Q3. What do you understand by secondary data? State their chief sources. What are the requisites of a good questionnaire? What steps would you follow to make a good questionnaire?

Q4. What do you mean by statistical average? Describe the characteristics of a good statistical average. What are the functions of an average? Differentiate between Arithmetic Mean, Geometric Mean, and Harmonic Mean.

Q5. What is correlation? Distinguish between positive and negative correlation. Discuss the scope of correlation analysis. What do you know about scatter diagram?

Q6. Compute Karl Pearson's coefficient of correlation from the following data:

X : 8 11 15 10 12 16

Y : 6 9 11 7 9 12

Q7. Explain the meaning of statistical quality control. What are the advantages of statistical quality control? Point out its usefulness in industry.

Q8. What do you mean by the term "probability"? One card is to be drawn at random from a pack of cards. What is the probability that the card drawn is a (i) King (ii) Queen (iii) King or Queen (iv) King with a Spade?