

CODE NO: R5-11/MBA

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MBA-I Semester Regular Examinations February -2010

STATISTICS FOR MANAGEMENT

Time:3hours

Max.Marks:60

Answer any Five questions  
All questions carry equal marks

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- 1.a) Explain about the origin and growth of statistics.  
b) Explain about frequency distribution.
- 2.a) What are the merits and limitations if sampling.  
b) Explain the general rules of tabulation.
- 3.a) Calculate the value of mode for the following data.  
Marks:           10 15 20 25 30 35 40  
Frequency:       8 12 36 25 28 18 9  
b) In a moderately asymmetrical distribution, the mode and mean are 32.1 and 35.4 respectively. Find the value of median.
- 4.a) Blood serum cholesterol levels of 10 persons are as given below.  
240, 260, 290, 245, 255, 288, 272, 263, 277 and 251. Calculate standard deviation with the help of assumed mean.  
b) Find Bowley's coefficient of skewness for the following frequency distribution.
- |                    |     |    |    |    |    |    |   |
|--------------------|-----|----|----|----|----|----|---|
| No.of children per |     |    |    |    |    |    |   |
| Family             | : 0 | 1  | 2  | 3  | 4  | 5  | 6 |
| No. of families    | : 7 | 10 | 16 | 25 | 18 | 11 | 8 |
5. Calculate Karl Pearson's coefficient of correlation between age and playing habits from the data given below. Also calculate probable error.
- |                 |       |     |     |     |     |     |
|-----------------|-------|-----|-----|-----|-----|-----|
| Age             | : 20  | 21  | 22  | 23  | 24  | 25  |
| No.of students  | : 500 | 400 | 300 | 240 | 200 | 160 |
| Regular Players | : 400 | 300 | 180 | 96  | 60  | 54  |
- 6.a) Explain simple Aggregative method of constructing index numbers.  
b) From the following data compute price index by using weighted average of price method using arithmetic mean.
- |           |                     |                |                     |
|-----------|---------------------|----------------|---------------------|
| Commodity | P <sub>0</sub> (Rs) | Q <sub>0</sub> | P <sub>1</sub> (Rs) |
| Sugar     | 3.0                 | 20 kg          | 4.0                 |
| Flour     | 1.5                 | 40 kg          | 1.6                 |
| Milk      | 1.0                 | 10 lt          | 1.5                 |
- 7.a) Describe briefly the procedure of testing Hypothesis.  
b) In a random sample of 1000 persons from town A, 400 are to be consumers of wheat. In a sample of 800 from B, 400 are found to be consumers of wheat. Do these data reveal a significant difference between town A and town B, so far as the proportion of wheat consumers is concerned.
8. Explain pie diagram and draw a pie diagram for the following data of sixth five-year plan public sector outlays.
- |                                   |          |
|-----------------------------------|----------|
| Agriculture and Rural development | : 12.9%  |
| Irrigation, etc.,                 | : 12.5%  |
| Energy                            | : 27.2%  |
| Industry and minerals             | : 15.4%  |
| Transport, communication          | : 15.9%  |
| Social services and others        | : 16.1%. |

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