Tuesday, $8^{\text {th }}$ October, 2013
Time: 1.00 to 2.00 p.m
Note: (i) Figures to the right indicate marks.
(iii) Simple/Scientific calculator is allowed.
V.P. \& R.P.T.P. Science College
B.Sc. Semester-III Examination

## Internal Examination

FOUNDATION OF STATISTICS - I
M. Marks: 30
(US03FSTA01)
(ii) Graph paper will be provided on request.
(iv) Q. 3 to Q. 5 each has 6 marks
Q. 1 Multiple Choice Questions
(1) -------------------------- are the first hand information collected, compiled and published by organization for some purpose.
(a) Primary data
(b) Secondary data
(c) Qualitative data
(d) Quantitative data
(2) Which of the following is/ are part of statistical table?
(a) Caption
(b) Head note
(c) Foot note
(d) All of the above
(3) How often does the Census Bureau take a complete population count in India?
(a) Every year
(b) Every 5 years
(c) Every 10 years
(d) Twice a year
(4) In a village of 300 population, $60 \%$ constitutes Hindu, $20 \%$ Muslims, $10 \%$ Sikhs and $10 \%$ Christians. We want to take a sample of $10 \%$ of the population to study the eating habits of this population. The best method would be:
(a) Simple Random Sampling
(b) Stratified Random Sampling
(c) Systematic Sampling
(d) All of these
(5) Which diagram do you considered to be most suitable for the data given below?

| Year | Profits ('000 Rs.) |  |
| :---: | :---: | :---: |
|  | Company A | Company B |
| $1996-97$ | 120 | 90 |
| $1997-98$ | 135 | 95 |
| $1998-99$ | 140 | 108 |
| $1999-00$ | 160 | 120 |


(a) Simple Bar
(b) Sub-divided Bar
(c) Multiple Bar
(d) Pie Chart
(6) Which of the following can be described as a categorical variable?
(a) Body Mass Index(BMI)
(b) Body temperature
(c) Pulse rate
(d) Favorite Food
Q. 2 Short Type Questions (Attempt Any Three)
(a) State the importance of diagrams.
(b) What is secondary data? Give any two sources of secondary data.
(c) State the aim of sample survey.
(d) Give any two definitions of Statistics.
(e) State the purpose of classification.
(f) Give two examples each of nominal and ordinal data.
Q.3(a) List out the various methods of drawing a sample. Write in brief about any one of them.
(b) Describe in brief about application of Statistics in any two fields.

OR
Q.3(a) is a suitable method of collecting primary data in cases where the informants are literate and spread over a vast area. Fill in the blank and describe the method.
(b) Write a note on Simple Random Sampling (SRS).
Q.4(a) What is tabulation? List out the various parts of table. Describe in brief about any one of them.
(b) State the various methods of drawing a random sample. According to you which method do you consider to be most suitable if population is small? Write in brief about them.
Q.4(a) Write a note on bar diagram.
(b) 1660 candidates appeared for a competitive examination, 442 were successful. 256 attended coaching class and of these 150 came out successful. Present the above data in an appropriate form of tabulation. State its objective(s).
Q.5(a) List out the various types of diagrams you have studied. Describe any one of them by giving an example.
(b) Draw a blank table to show the no. of candidate sexwise, appearing in the first year, second year and third year examination of university in the faculty of Arts, Commerce and Science in a certain year.

OR
Q.5(a) What do you mean by classification? State the rules for classification.
(b) Present the following information through a most suitable diagram. State its objective(s).

Country wise diabetic patients

| Country | Year |  |
| :---: | :---: | :---: |
|  | 2007 | $2015^{*}$ |
| China | 30.9 | 69.9 |
| USA | 19.2 | 59.3 |
| Russia | 9.6 | 25.4 |

* Projected or estimated ** figures in million.


