



M 11612

Reg. No. : .....

Name : .....

I Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.T.T.M./B.B.M./B.C.A./ B.S.W. Degree  
(CCSS-Reg./Supple./Improv.) Examination, November 2011

**CORE COURSE IN STATISTICS**

**1B01 STA : Methodology and Perspectives of Statistics**

Time : 3 Hours

Max. Weightage : 30

**Instruction : Use of calculator and statistical tables permitted.**

**PART – A**

Answer **any 10** questions. Weightage **1 each** :

1. Mention the major areas of science.
2. What is classical approach to science ?
3. What is empiricism ?
4. What is a hypothesis in science ?
5. What is lureka intuition ?
6. What is statistics in its singular sense ?
7. How the theory of probability originated ?
8. What is vital statistics ?
9. Define population.
10. Distinguish between nominal and ordinal data.
11. What is a bar diagram ?

**PART – B**

Answer **any 6** questions. Weightage **2 each** :

12. What is meant by interdisciplinary studies ? Give an example.
13. Distinguish between relativism and realism.
14. Distinguish between hypothesis generated by induction and deduction.

P.T.O.



15. Distinguish between independent and dependent variables.
16. Discuss Type I and Type II errors in hypothesis testing.
17. Discuss the technique of modeling used in scientific study.
18. Distinguish between corroboration and falsification.
19. Discuss the scope of statistics in different areas of science.
20. Explain the technique of sampling. Give two examples of sampling from every day life.

### PART – C

Answer **any 2** questions. Weightage **4 each** :

21. Explain the important steps in a scientific study.
22. Discuss the limitations and distrust of statistics.
23. Discuss the origin and development of the theory of probability.
24. Draw a histogram and frequency polygon to the following data :

<b>Marks</b>	: 0 – 10	10 – 20	20 – 30	30 – 40	40 – 60
<b>Frequency</b>	: 10	15	30	12	8

### PART – B

12. What is meant by interdisciplinary studies? Give an example.
13. Distinguish between relativism and realism.
14. Distinguish between hypotheses generated by induction and deduction.