

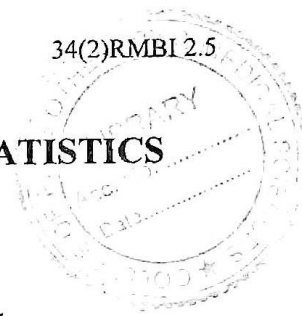
2014

**RESEARCH METHODOLOGY & BIostatISTICS**

Full Marks: 80

Time: 3 Hours

*The figures in the margin indicate full marks for the questions.*



1. Answer the following questions (any two) 2×10
- i) What do you mean by measurement in research? Classify the scales of measurement and discuss any two of them in detail.

Or

What is Central Tendency of scores? What are the guidelines for the use of its various measures?

- ii) What is Probability sampling? Discuss the different types of probability sampling.

Or

Compare the incidence of accidents in power and hand driven machines. The table of frequencies is given below-

Machinery	Accidents	No accidents	Total
Power	8	112	120
Hand	15	165	180
Total	23	277	300

Prove the incidence of accidents by  $X^2$  test.

2. Answer the following questions : (any eight) 8×5
- i) What are the basic assumptions underlying Analysis of Covariance?
- ii) What is one-tailed and two-tailed test?
- iii) What is sampling frame and sampling error?
- iv) Discuss schedule as a technique of data collection.

P.T.O.

- v) What is frequency polygon? Draw a frequency polygon for the following table of distribution.  
(Use graph paper)

Class Intervals	Frequency
80-84	2
75-79	4
70-74	7
65-69	9
60-64	12
55-59	8
50-54	5
45-49	2

N=49

- vi) Describe the different types of analysis.  
vii) How do you measure the power of a hypothesis test?  
viii) What is student's 't' distribution?  
ix) Write the features of a good sample design  
x) What is 'tabulation' in processing operations?

3. Answer in short :

10×

- i) What is Ogive?  
ii) What is Level of significance?  
iii) What is variable?  
iv) What is computer in research?  
v) What is quantitative approach in research?  
vi) What is descriptive statistics?  
vii) What is Normal probability curve?  
viii) What is scaling?  
ix) Mention any two objectives of research.  
x) What is standard error?

□□□□

