

M.Sc. EPIDEMIOLOGY DEGREE EXAMINATION

Part I

Paper I - PRINCIPLES OF EPIDEMIOLOGY AND BIostatISTICS

Time: Three hours

Max.marks:100

Answer All Questions

1. Write briefly on:
 - (a) Standard error versus standard deviation
 - (b) Confidence interval versus 'p value'
 - (c) Berkson's bias
 - (d) Effect modification. (30)

2. Define likelihood ratios in relation to diagnostic tests. What are the advantages of likelihood ratio over sensitivity and specificity in defining test characteristics? Illustrate their use in multiple tests. (20)

3. Write briefly on:
 - (a) Mantel-Hanzel statistic
 - (b) 'Healthy worker' effect
 - (c) Age and sex adjusted rates
 - (d) Conditional probability. (30)

4. What are the strengths and weakness of case control studies? (20)