

International Faculty of Medicine and Stomatology

Department of Epidemiology and Biostatistics

Subject: Epidemiology with Biostatistics

Exam Topics

1. Subject of epidemiology, its goal and objectives
2. History of epidemiology
3. Types of variable
4. Parameters of central location
5. Parameters of dispersion
6. Range, percentile, quartile
7. Variance and Standard error of the mean
8. Standard error of the mean
9. Confidence interval, its calculation and implication
10. P-value, its interpretation
11. t-test and its calculation; p value
12. Tests of statistical significance. Interpretation of results.
13. Statistical testing of hypothesis
14. Types of hypothesis
15. Correlation and regression
16. Data Presentation
17. Characterization of steps in scientific research
18. Descriptive study
19. Cross-sectional study
20. Morbidity and Mortality rates
21. Analytical epidemiological methods
22. Design of a cohort study
23. Positive and negative sides of cohort study
24. Risk factor evaluation
25. Attack rate
26. Case-control study
27. Relative comparison of cohort and case-control studies
28. Odds ratio, its calculation and interpretation
29. Experimental study
30. Randomized trial
31. Epidemic process
32. Modes of transmission
33. Epidemic triangle
34. Epidemiological surveillance
35. Steps of outbreak investigation
36. Disease prevention: Levels of prevention
37. Vaccination in infectious and chronic diseases prevention

38. Hospital infections: Epidemiology and prevention
39. Clinical Epidemiology; Diagnostic Tests
40. Blood infections: Hepatitis B and C
41. HIV infection