

TM244974M

Reg. No :

Name :

MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024
2022 ADMISSIONS REGULAR
SEMESTER IV - Applied Statistics and Data Analytics
ST4E03TM - Biostatistics

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight

(8x1=8)

1. Distinguish Weibull and exponential distribution.
2. Write the two parametric methods for comparing two survival distributions.
3. Write the test statistic of likelihood ratio test for exponential distribution.
4. write an example for censoring.
5. What is complete life table?
6. How do you explain Cox proportional hazard model?
7. Explain stratified cox model and cox proportional hazard model.
8. What is stratified cox model?
9. Define placebo.
10. Define blocked randomization.

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. Explain parametric methods for comparison of two gamma distribution.
12. Explain Rayleigh distribution and its application.
13. Compare type I and type II censoring.
14. Explain censoring with an example.
15. Difference between stratified cox model and cox proportional hazard model.
16. What is stochastic model?
17. Write about different types of blinding.
18. Discuss about parallel and cross-over design.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. List out any 4 survival distributions and their applications.
20. Give a note on life table.
21. Write a note on cox proportional hazard model.
22. Discuss about 4 phases of clinical trials.

