

Indian Statistical Institute

M.S.(QMS) First Year Second Semester – Reliability, Maintainability and Safety - II

Date: 24/02/2018

Time: 2 hours

Maximum Marks: 50

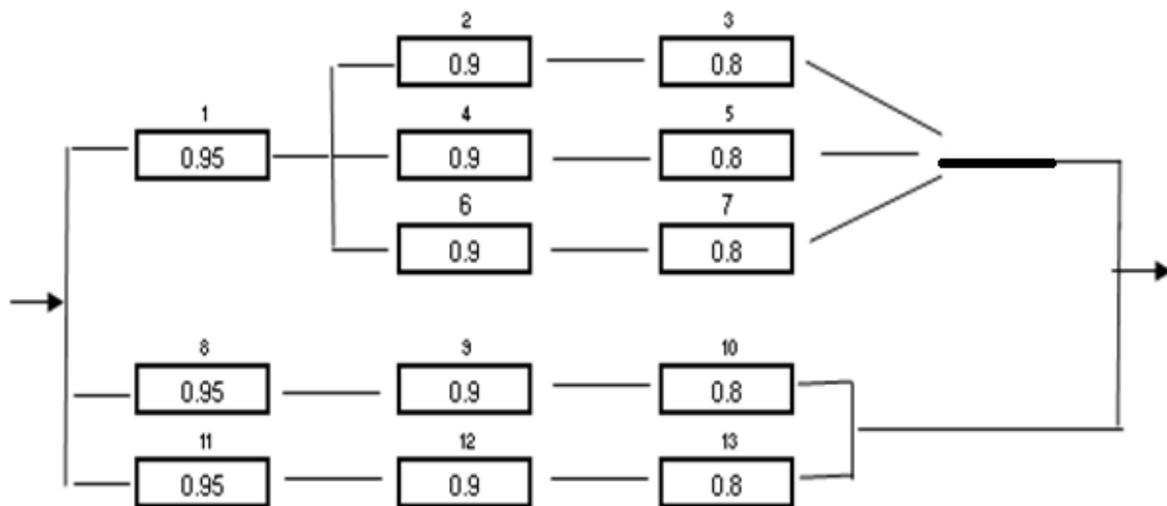
1. Five automotive air conditioner switches were tested to failure. The failures occurred at the following cycles.

1410, 1872, 3138, 4218, 6971

Estimate the 90% two-sided confidence interval for mean life.

[10]

2. Calculate the system reliability for the following system.



[10]

3. Define the general form of likelihood function for interval censored data, assuming exponential distribution.

[10]

4. Define Accelerated Life testing. Explain three types of designs for accelerated life testing [2 + 6 = 8]

5. Write short note on the following

- Progressive censoring
- FMEA
- FTA

[3 × 4 = 12]