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Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(Aerospace Engg.) (Sem.-8)**  
**AEROSPACE QUALITY ASSURANCE**  
Subject Code : ASPE-401  
M.CODE : 72564

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.

**SECTION-A****1. Explain the following terms and their importance :**

- a) Concession and deviation
- b) Sampling risk
- c) Benchmarking
- d) Concept of variation
- e) Self-inspection
- f) Failure patterns
- g) Zero defect analogy
- h) Early warning concept
- i) CMM
- j) Quality culture

### SECTION-B

2. Explain the procedure to maintain quality assurance during repair of an aircraft.
3. Explain various quality concepts briefly.
4. Explain how you predict reliability during design.
5. Explain various rules of thumb for sampling.
6. How continuous process regulation affects quality control?

### SECTION-C

7. Explain the following quantitative methods for summarizing data :
  - a) Exponential probability distribution
  - b) Poisson distribution
  - c) Normal Curve
8. What do you understand by 'design assurance'? Explain the following concepts with respect to 'design assurance'.
  - a) Design for time oriented performance
  - b) Design for safety
  - c) Design for basic function requirement
9. Write notes on the following :
  - a) FMECA
  - b) Fault tree analysis

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**