



Total Marks: 80

Time: 3 Hours

Note: 1) Q. No. 1 is compulsory

- 2) Attempt any three from the remaining question.
- 3) Support your answer with Flow charts, block diagram, figures wherever required.
- 4) Numbers in bracket to right hand side indicates the marks.

Q. No. 1 COMPULSORY

- (a) Concurrent Engineering (05)
- (b) Juran's Trilogy (05)
- (c) Supplier selection (05)
- (d) Process Capability & Capability Index (05)

Q. No. 2

- (a) For customer delight – Innovation is inevitable, Explain the concept with KANO's mode (10)
- (b) Explain process control by variable and process control by attribute with suitable application examples of each. (10)

Q. No. 3

- (a) For A4 size bond paper, with diagram explain the push – pull view of supply chain and its upstream and downstream supplier with stages of supply. (10)
- (b) For zero defect in world class manufacturing Lean philosophy is considered as a foundation. Discuss. (10)

Q. No. 4

- (a) How you will find sporadic problem and chronic problem? What methods you will use to control the problem (10)
- (b) What are the principles of TQM? Differentiate between old and new culture of TQM (10)

Q. No. 5

- (a) Explain voice of customer and QFD. What are the elements and matrix relationship for QFD? Explain with structure (10)
- (b) Product quality increases when cost increases – justify the statement right or wrong using cost of quality (10)

Q. No. 6 Write short note

(05 x 04=20)

- (a) OC Curve
- (b) Benchmarking
- (c) Mission and Vision statement
- (d) Durability