



- Notes :
1. Answer **three** question from Section A and **three** question from Section B.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Illustrate your answer necessary with the help of neat sketches.
 5. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION – A

1. a) What is CAPP? Explain various types of CAPP. 8
b) State & explain benefits of CAPP. 5
2. Explain the construction & working of various types of CMM. 14
3. a) Describe the features of flexible inspection system. 7
b) Explain the working of touch trigger probes used in CMM. 6
4. a) What is machine vision? Explain stages of machine vision. 8
b) State & explain applications of machine vision. 5
5. a) Explain the benefits of automated inspection system. 5
b) Explain the terms. 8
 - a) System Capacity.
 - b) System Efficiency.
 - c) Actual Capacity.
 - d) Designated Capacity.

SECTION – B

6. a) Explain MRP system components in detail. 6
b) Compare JIT purchasing with traditional purchasing. 7
7. Explain: 14
 - i) Computer Aided Inventory Management.
 - ii) Computer Integrated Material Management.
8. a) List out seven form of waste in production as identified by Taiichi Ohno. 8
b) What do you mean by Gross Requirement and Det Requirement? 5
9. a) Compare and contradict the concept of push system & pull system. 7
b) Which type of workplace layout is best suitable for JIT? Explain. 6
10. In a bookstall, the demand for a particular newspaper has following probability distribution: 13

Daily Demand	0	1	2	3	4	5
Probability	0.10	0.2	0.25	0.15	0.2	0.1

Using the above data, simulate a 15 day sequence of demand. Also find average demand.

Use the following random numbers:

37, 27, 91, 13, 80, 10, 54, 60, 49, 78, 66, 44, 32, 17, 42.

