QUESTION BANK

Unit-III

Part–A(Short Answer Questions)				
S.No.	**Question**	**BT**	**CO**	**PO**
1	What does NC stand for in the context of production systems?	L1	CO3	1,9
2	What is the primary function of an NC system in manufacturing?	L1	CO3	1,9
3	What is the difference between NC and CNC (Computer Numerical Control)?	L2	CO3	1,9
4	What kind of code is typically used in NC programming?	L2	CO3	1,9
5	What are the key components of an NC system?	L2	CO3	1,9
6	What is the significance of "interpolation" in NC systems?	L2	CO3	1,9
7	How does NC improve manufacturing efficiency?	L3	CO3	1,9
8	What is meant by "point-to-point" control in NC?	L1	CO3	1,9
9	What does a "tool path" refer to in an NC system?	L1	CO3	1,9
10	What is the role of a feedback system in an NC system?	L2	CO3	1,9

Part–B (Long Answer Questions)					
11		Explain the concept of Numerical Control (NC) in manufacturing. How does it enhance precision and productivity in the production process?	L3	CO3	1,9
12	a)	Describe the differences between Manual, CNC, and DNC systems in manufacturing. What are the advantages of CNC over traditional NC?	L3	CO3	1,9
	b)	What are the main types of NC machine tools? Explain each with examples of their applications in industry.	L3	CO3	1,9
13	a)	What are the major components of an NC system? Explain the role of each component in the overall functioning of the system.	L3	CO3	1,9
14	a)	Explain the concept of Direct Numerical Control (DNC). How does DNC improve production management, and what are the challenges associated with its implementation?	L2	CO3	1,9
	b)	What is Computer Numerical Control (CNC)? How does it differ from traditional NC and what are its key benefits in modern manufacturing industries?	L3	CO3	1,9
15		Discuss the advantages and limitations of NC systems in production environments. How does NC contribute to the flexibility and automation of manufacturing processes?	L3	CO3	1,9