B E (MECHANICAL) QUESTION BANK COMPUTER AIDED MANUFACTURING EACH QUESTION CARRIES 10 MARKS

Q.1	Differentiate the NC and CNC machines.
Q.2	Explain working of recirculating ballscrew and preloading of ballscrew.
Q.3	Explain G00, G01, G02 and G03 codes with appropriate example.
Q.4	What is canned cycles? Explain any two drilling canned cycles with their syntax.
Q.5	What is DNC? What are the advantages of using DNC on the shop floor?
Q.6	Define GT. Explain OPITZ coding system for GT.
Q.7	Explain different types of machine cells and layouts in GT.
Q.8	How GT cell is different from Process Layout? Explain.
Q.9	Explain AS/RS and AGV for manufacturing system.
Q.10	Explain different flexibilities in FMS.
Q.11	Explain different elements of FMS.
Q.12	Explain common joints used in robots.
Q.13	Explain different applications of robots.
Q.14	Explain Manufacturing Resource Planning.
Q.15	Explain different types of CMM.
Q.16	Explain Retrieval CAPP system.
Q.17	Explain each inputs of the MRP system.
Q.18	Explain utilization of CNC machines in batch production.
Q.19	Explain axes designation for CNC machines.
Q.20	Explain open loop and closed loop control system of CNC machines.
Q.21	What is canned cycles? Explain any three turning canned cycles with their syntax.
Q.22	Define GT. Explain parts classification and coding for GT.
Q.23	What is composite part concept? Explain objectives of cellular manufacturing.
Q.24	Explain different types of machine cells and layouts in GT.
Q.25	Explain different FMS components.
Q.26	Explain types of FMS.
Q.27	Explain common robot configurations.
Q.28	Explain production planning and production control.
Q.29	Explain Generative CAPP system.
Q.30	Explain working of recirculating ball screw and preloading of nut.
Q.31	Explain part origin, machine origin and program origin for CNC programming.
Q.32	Explain subprogramming with proper example.
Q.33	Explain different robot programming languages.
Q.34	Explain importance of GT in CAPP.
Q.35	Explain the important features of CNC machines.
Q.36	Explain stick-slip phenomena and antifriction guide ways.
Q.37	Explain different types of NC machines.
Q.38	Explain NC, CNC and DNC machines.
Q.39	Explain the importance of CNC machines and robots in FMS.
Q.40	Differentiate the GT and the FMS.