

Model Question Paper-1 with effect from 2019-20 (CBCS Scheme)

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Fourth Semester B.E. Degree Examination CAD/CAM

TIME: 03 Hours

Max. Marks: 100

Note: Answer any **FIVE** full questions, choosing at least **ONE** full question from each **MODULE**.

		Module -1	Bloom's Taxonomy Level	Marks
Q. 1	a	Define CAD, CAE and CATD	I	6
	b	Explain the influence of computers in manufacturing environment.	V	8
	c	List and specify the input and output devices of CAD	IV	6
OR				
Q. 2	a	Explain the role of computers in design and manufacturing	V	10
	b	List the advantages and limitations of CAD and CAM.	I	10
Module-2				
Q. 3	a	With the help of a neat sketch explain graphics software configuration.	V	8
	b	Explain Construction of a Geometry in CAD.	V	6
	c	Discuss Wireframe and Solid models.	VI	6
OR				
Q. 4	a	Explain the elements of a NC system.	V	8
	b	Explain positioning and coordinate system in NC.	V	6
	c	List the advantages and limitations of NC system.	I	6
Module-3				
Q. 5	a	With the help of a neat sketch explain vertical milling machine.	V	10
	b	With the help of a neat sketch explain ATC work holding devices.	V	10
OR				
Q. 6	a	With the help of a neat sketch explain CNC turning centers.	V	10
	b	Briefly explain tooling system in turning center.	V	10
Module-4				
Q. 7	a	Define a part program. Explain the steps involved in development of a part program.	I, V	10
	b	Develop a CNC part program for the part shown in fig.Q.7 (b). Assume a material thickness of 15 mm and slot depth as 10 mm.	VI	10

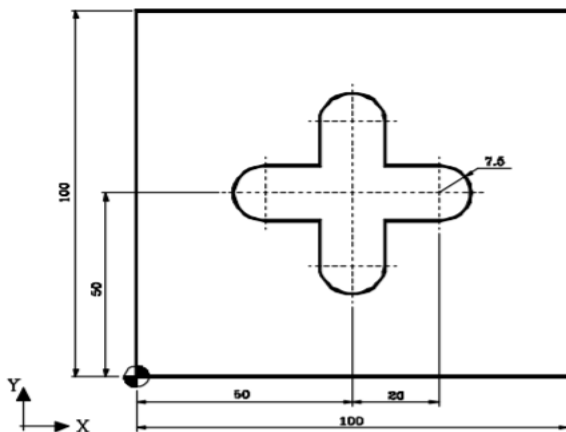


Fig. Q.7(b)

OR

Q. 8 a Define APT language and explain the four statements of APT language.

I, V 10

b Develop a CNC part program for a part shown in fig.Q.8(b). All dimensions are in mm.

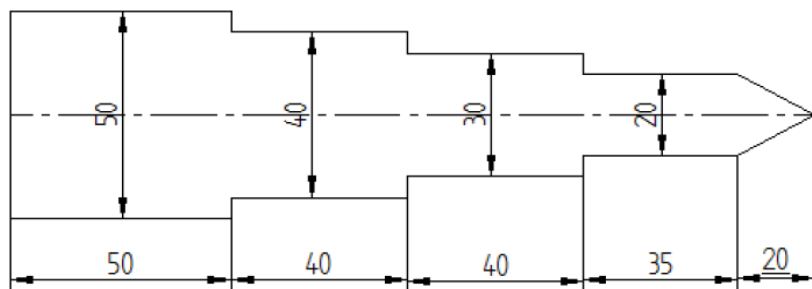


Fig. Q.8(b)

VI 10

Module-5

Q. 9 a Define a Robot. With the help of a neat sketch explain the Robot configuration.

I, V 10

b List and explain the various applications of a Robot.

I, V 10

OR

Q.10 a Explain the Robot motions with examples.

V 10

b Explain: workcell, control and interlock.

V 10