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

USN | | | | | | | | | | |

Fourth Semester B.E. Degree Examination
Manufacturing Technology

**TIME: 03 Hours**   **Max. Marks: 100**

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

		Module -1	***Bloom's Taxonomy Level**	**Marks**
Q.01	a	Explain the classification of manufacturing process.	L2	8
	b	Explain with sketch different pattern allowances.	L2	8
	c	Explain the step involved in sand casting process.	L2	4
		OR		
Q.02	a	List and brief the desired characteristics of the casting sand used in foundry.	L2	5
	b	How gating system in casting process helps for production of quality casting.	L3	7
	c	Explain briefly any thee sand preparation equipment.	L2	8
		Module-2		
Q. 03	a	Briefly explain how the metal working process are classified?	L2	6
	b	Explain the die design parameters in forging process.	L2	8
	c	Explain the forging defects and remedies.	L2	6
		OR		
Q.04	a	Explain with sketch any two types of rolling mills.	L2	6
	b	Explain wire drawing and rod rolling process.	L2	8
	c	Explain any two methods of tube drawing.	L2	6
		Module-3		
Q. 05	a	With sketch Explain direct and indirect extrusion process.	L2	6
	b	Differentiate progressive die and combination die in sheet metal forming.	L2	6
	c	Explain with sketch following operations in sheet metal forming. i) Deep Drawing ii) Stretch forming	L2	8
		OR		
Q. 06	a	Explain with neat sketch MIG welding. Mention its applications.	L2	10
	b	Explain the atomic hydrogen welding. List the advantages and limitations.	L2	10
		Module-4		
Q. 07	a	Explain the working principle of USM process and its applications.	L2	10
	b	Explain the working principle of Electro Chemical Machining process and its applications.	L2	10
		OR		
Q. 08	a	Explain with neat sketch PAM process. Mention its merits and demerits.	L2	10
	b	Explain working principal of LBM process and its applications.	L2	10
		Module-5		
Q. 09	a	Describe salient features of CNC system along with block diagram.	L2	10
	b	Explain the steps involved in part programming.	L2	10
		OR		
Q. 10	a	Write the part program for the component shown in fig 1. All dimensions are in mm.	L3	10
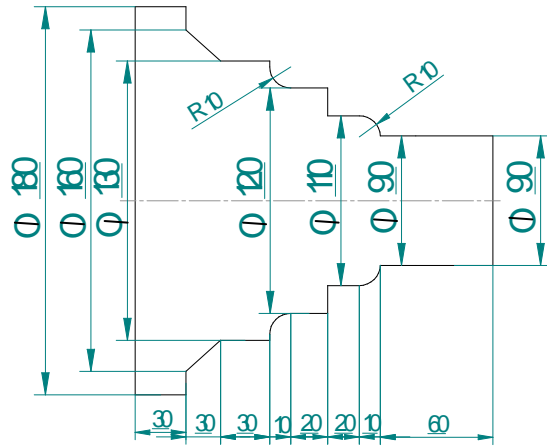
Fig. 1

	b	Write the CNC milling part program for the following profile given	L3

ALL DIMENSIONS ARE IN mm
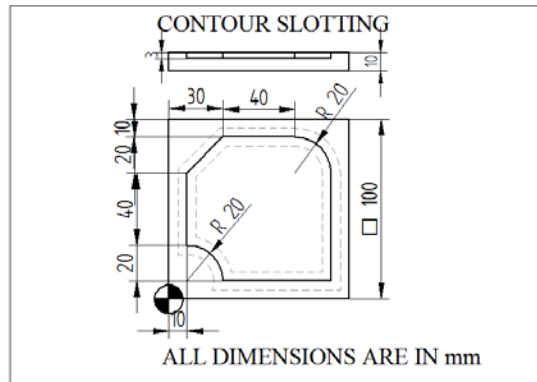
*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.