

Model Question Paper-2 with effect from 2019-20 (CBCS Scheme)

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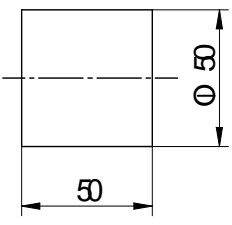
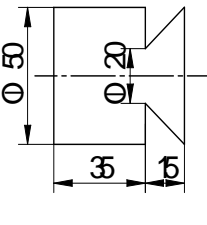
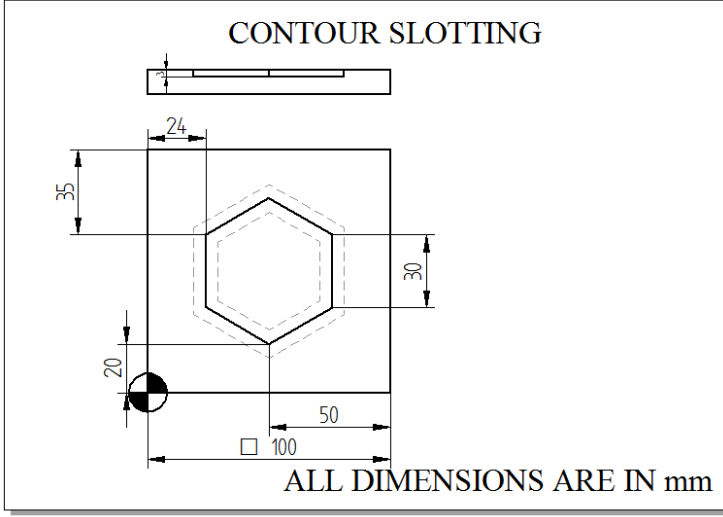
Fourth Semester B.E. Degree Examination Manufacturing Technology

TIME: 03 Hours

Max. Marks: 100

Note: 01. 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 steps involved in casting process with flow diagram.	L2	10
	b	Brief the factors influencing on selection pattern material.	L1	5
	c	Mention the advantages and limitations of sand casting process.	L1	5
OR				
Q.02	a	Briefly discuss the importance of additives and binders in sand moulding.	L2	6
	b	Explain the desirable properties of moulding sand.	L2	6
	c	Explain with neat sketch the working of jolt and squeeze moulding machine.	L2	8
Module-2				
Q. 03	a	Differentiate between cold and hot working process.	L2	6
	b	Mention the advantages and limitations of metal working process.	L1	6
	c	With sketch explain different types of forging operations.	L2	8
OR				
Q.04	a	Explain with sketch i) Four high rolling mill ii) Tandem rolling mill	L2	10
	b	Briefly explain different types of rolling variables.	L2	5
	c	Explain with sketch different elements of drawing die.	L2	5
Module-3				
Q. 05	a	Explain with sketch hydrostatic extrusion process.	L2	5
	b	Explain the different methods used in production of seamless pipes and tubes.	L2	10
	c	Explain how circular washers are produced using compound die.	L2	5
OR				
Q. 06	a	Explain with neat sketch TIG welding and its unique applications.	L2	10
	b	Explain influence of the process parameters in Submerged Arc Welding process. Mention its advantages and limitations SAW.	L2	10
Module-4				
Q. 07	a	Explain the need for non-traditional machining process.	L2	5
	b	Explain working principal of AJM with neat sketch.	L2	10
	c	Explain working principal of LBM process and its applications	L2	5
OR				
Q. 08	a	Explain with neat sketch EBM. Mention its merits and demerits.	L2	10
	b	Explain working principle of EDM. List the advantages, limitation applications.	L2	10
Module-5				
Q. 09	a	Explain any two CNC machining centers.	L2	10
	b	Mention the advantages, limitations and applications of CNC machines.	L1	6
	c	Describe the following codes. i) G03 ii) G21 iii) M05 iv) M06	L2	4

		OR			
Q. 10	a	<p>Write the CNC part program for the following profile given.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>BEFORE MACHINING</p>  </div> <div style="text-align: center;"> <p>AFTER MACHINING</p>  </div> </div> <p style="text-align: center;">All dimensions are in mm.</p>		L3	10
	b	<p>Write the CNC milling part program for the following profiles given.</p> <div style="text-align: center;"> <p>CONTOUR SLOTTING</p>  <p style="text-align: center;">ALL DIMENSIONS ARE IN mm</p> </div>		L3	10

*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.