

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

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Fourth Semester B.E. Degree Examination Metal Cutting and Forming

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	Briefly explain the classification of cutting tools	L1	05
	b	Explain the mechanism of chip formation?	L2	05
	c	With a sketch explain the Merchant Circle diagram	L3	10
OR				
Q.02	a	With a neat sketch explain the parts of a Lathe machine	L1	08
	b	Explain the following operation in a Lathe machine 1. Taper turning 2. Thread cutting and 3. Eccentric turning	L4	12
Module-2				
Q. 03	a	Explain the various operations can perform in a Milling machine.	L2	06
	b	Explain the methods of Indexing?	L3	08
	c	Differentiate between drilling, boring and reaming.	L2	06
OR				
Q.04	a	With a neat sketch explain the working of Planning machine.	L1	08
	b	What are the classification of Grinding machine	L2	06
	c	With a sketch explain the center less grinding	L2	06
Module-3				
Q. 05	a	What is 'tool wear'? Explain the forms of tool wear.	L1	08
	b	Explain the process parameters that effects on tool life.	L2	04
	c	Explain the types of cutting fluids	L2	08
OR				
Q. 06	a	Write a note on economics of machining process.	L4	04
	b	Explain the machining parameters that effects on the surface finish.	L3	08

	c	How do you choice the cutting speed and feed for increasing the tool life.	L4	08
Module-4				
Q. 07	a	Give the brief classification of the metal forming process.	L1	04
	b	What is forging? Explain the basic equipments for forging	L1	06
	c	With a neat sketches explain the types of rolling mills	L2	10
OR				
Q. 08	a	With a neat sketch explain the wire drawing process.	L2	10
	b	Explain the various types of extrusion processes	L2	10
Module-5				
Q. 09	a	Explain the different operations that can performed on a sheet metal	L1	08
	b	What are the variables that can be controlled during the sheet drawing process	L2	06
	c	Explain the Trimming and Shearing operations of a sheet metal	L3	06
OR				
Q. 10	a	Explain the concept of bending of a sheet metal?	L2	04
	b	Explain the force calculations in the bending process	L4	06
	c	With a neat sketches explain the following dies, 1. Compound die 2. Combination die	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.