

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

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Fourth Semester B.E. Degree Examination MANUFACTURING PROCESS II

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 geometry of single point cutting tool with neat sketch.	L2,CO1	08
	b	Explain types of rake angle.	L2,CO1	06
	c	The following data refers to an orthogonal cutting process. Chip thickness 0.62mm, feed 0.2mm, rake angle 15° . Calculate chip reduction coefficient and shear angle.	L3,CO1	06
OR				
Q.02	a	Explain different types of chip formation in metal cutting process	L2,CO1	08
	b	The following data were obtained during orthogonal turning of certain work piece material. Chip thickness=0.45mm, width of cut=2.5mm, feed=0.25mm/rev, cutting force=113kg, thrust force=29.5kg, the cutting speed was 150m/min and rake angle was 10° . Calculate the following : a) Chip thickness ratio b) chip reduction coefficient c) shear angle d) velocity of chip e) friction force f) shear stress	L3,CO1	12
Module-2				
Q. 03	a	Explain ram type turret lathe	L2,CO1	08
	b	Write specifications of shaper	L2,CO1	06
	c	Explain various operations performed on shaper	L2,CO1	06
OR				
Q.04	a	Classify planer machines, and explain anyone with neat diagram.	L2,CO1	10
	b	With a neat sketch open and cross belt drive mechanism of a planer	L2,CO1	10
Module-3				
Q. 05	a	Differentiate up milling and down milling.	L2,CO2	06
	b	With neat sketch explain column and knee milling machine	L2,CO2	06
	c	Write different operations performed on milling machine	L2,CO2	08
OR				
Q. 06	a	With a neat sketch explain the constructional features of center less grinding	L2,CO2	10
	b	Explain truing and glazing in grinding.	L2,CO2	10
Module-4				

Q. 07	a	Explain radial drilling machine	L2,CO1	10
	b	With neat sketch explain drill bit nomenclature	L2,CO1	10
OR				
Q. 08	a	With neat sketch explain the constructional features of continuous surface broaching machine	L2,CO3	08
	b	With a neat sketch explain principle of lapping	L2,CO3	06
	c	With a neat sketch explain principle of honning	L2,CO3	06
Module-5				
Q. 09	a	With a neat sketch explain working principle of ultrasonic machining process and state its advantages	L2,CO4	10
	b	With a neat sketch explain working principle of electron beam machining and state its advantages	L2,CO4	10
OR				
Q. 10	a	With a neat sketch explain working principle of abrasive jet machining process and state its advantages	L2,CO4	10
	b	With a neat sketch explain working principle of laser beam machining and state its advantages	L2,CO4	10