Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program:TY.B Tech. (Mechanical Engineering)	**School of Technology**	**Department: Mechanical Engineering**
Course Code:MET305R1	**Course Title:Mechanics of Metal Cutting and Tool Design**	**Semester : V**
Day : Wednesday **Date : 17/02/2021**	**End Semester Examination**	**Time : 2Hrs.** **Max Marks : 50**

Question Paper

Instructions: 1) All Questions arecompulsory.
2) Draw neat diagrams whenever necessary.

			Marks	Bloom's Level	CO
Q.1		**Answer the following (any Two)**–			
	a)	What is chip formation? Name the different types of chips formed in metal cutting.	8	L2	CO 305.1
	b)	What is mean by dynamometer? Describe various types of dynamometers used for force measurement during metal cutting	8	L2	CO 305.1
	c)	Sketch a twist drill and describe its elements.	8	L2	CO 305.2
Q.2		**Answer the following (any two) –**			
	a)	What are the functions of cutting fluids? Enumerate the types of cutting f their properties.	8	L2	CO 305.3
	b)	Explain tool wear in metal cutting, name the list of tool wear and explain with neat sketch	8	L2	CO 305.3
	c)	Explain the locating principle of jig and fixtures with figure.	8	L3	CO 305.4
Q.3		**Answer the following (any two)**			
	a)	With sketch explain various types of bushes/clamps used in jigs/fixture.	9	L3	CO 305.5
	b)	Explain different cutting/non cutting operations in press working.	9	L2	CO 305.6
	c)	Describe the following concepts in press working: a. Clearance on punch/die. b. Center of pressure	9	L2	CO 305.6

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