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KHULNA POLYTECHNIC INSTITUTE

MECHANICAL TECHNOLOGY

SUBJECT: MACHINE SHOP PRACTICE-2(27032)

SEMESTER PLAN

THEORY

MARKS DISTRIBUTIONS			
TC	TF	PC	PF
20	30	50	50

WEEK	CLASS	ART	ESSENTIAL TOPICS WITH CONTENTS	REMARKS
1	1/1	1.1-1.5	➤ How to make single & multi-start thread ➤ difference between single & multi-start threads ➤ explain internal & external threads ➤ identify the parameter of threads ➤ list the problems on thread cutting	
	2/2	1.6-1.10	➤ Describing the lathe chuck, function of lathe chuck ➤ different types of lathe attachments ➤ function of lathe attachments ➤ mention the specification of center lathe according to size	
2	1/3	2.1-2.4	➤ Gaining tricks about shaper machine ➤ classify it ➤ seeing various types of components of shaper machine ➤ functions of shaper machine	
	2/4	2.5-2.8	➤ Describing about quick return mechanism, ram stroke length & cutting speed ➤ how to set a work piece on the table of shaper machine ➤ operation of shaper machine ➤ Specification of shaper machine	
3	1/5	3.1-3.4	➤ Define planer machine ➤ classify it ➤ finding the major components of planer machine ➤ how to set a work piece on the planer table	CLASS TEST-1 ➡
	2/6	3.5-3.7	➤ Operations of planer machine ➤ distinguish between shaper & planer machine ➤ Specification of planer machine	QUIZE TEST-1 ➡
➡ MID SEMESTER EXAMINATION ←				
4	1/7	4.1-4.2	➤ Define milling Machine ➤ mention the types of Milling Machine	
	2/8	4.3-4.4	➤ Finding main parts of Milling Machine ➤ distinguish among plain, universal & vertical Milling Machine	
	3/9	4.5-4.6	➤ The main attachment of Milling Machine ➤ various types of milling cutter & its maintenance	

	4/10	4.7	➤ Calculate cutting speed, feed & depth of cut, width of cut for milling operation of various metals	
	5/11	4.8	➤ How to Calculate indexing	
	6/12	4.9	➤ Describing the process of indexing such as simple compound & differential & angular operations	
	7/13	4.10	➤ Solving problems related on Milling Machine	
5	1/14	5.1-5.3	➤ Define CNC ➤ describe CNC Lathe Machine ➤ types of CNC Machine	CLASS TEST-2 
	2/15	5.4-5.6	➤ Difference between NC & CNC ➤ explain the axis of motion ➤ the features on CNC control panel	QUIZE TEST-2 
	3/16	5.7-5.8	➤ Explain the typical work offset & tool offset setup ➤ Advantages & disadvantages of CNC Machine	
REVIEWS FROM THE STUDENTS				

PRACTICAL OF MACHINE SHOP PRACTICE 2:

WEEK	CLASS 3 PERIOD	EXPERIMENT NAME WITH WORKING PROCESS	REMARKS
1	1	Setup work piece on four jaw chuck.	
2	1	Joining irregular job on face plate.	
3-4	4	Performing external single-start V thread.	
5-6	3	Performing internal single-start V thread.	
7-8	3	Performing SQUARE BLOCK on shaper machine.	
9-10	4	Making a V block on shaper machine	
11-12	3	Performing facing on planner machine	
13	3	Making a rack	
14	4	Making a spur gear	
15	4	Performing a straight slot cutting on shaper machine.	
16		REVIEWS FROM THE LEARNER	

SUBROTO SAHA

HEAD OF THE DEPARTMENT

MILAN

CLASS TEACHER