ASSIGNMENT-1 BRANCH: ME SEM: 6TH

LAST DATE OF SUBMISSION: 12/02/2015

IES GROUP OF INSTITUTIONS BHOPAL ASSINMENT UNIT-I-ME-601-OM

Date of Assign: 27/01/2015 Date of Submission:-12/02/2015

Q-1	What is the ERP?	2
Q-2	Explain Productivity?	2
Q-3	Explain porter's five forces model. How is this model useful in deciding business strategy?	3
Q-4	Explain the production strategy of make to order (MTO), make to stock (MTS) and assemble to order (ATO) with suitable examples?	7
Q-5	What do you understand by product design?	2
Q-6	Define operations management?	2
Q-7	What advantages of operation management?	3
Q-8	Discuss and compare MTO and BTO production strategy?	7

IES GROUP OF INSTITUTIONS BHOPAL ASSINMENT UNIT-I-ME-605-HMT

Date of Assign: 27/01/2015 Date of Submission:-12/02/2015

Q-1	Define thermal diffusivity and thermal resistance.	2
Q-2	Heat transfer rate per meter length of the tube	2
Q-3	The temperature of the outer surface of the insulation.	3
Q-4	A 3mm thick metal plate, having thermal conductivity K = 98.6 m/m - deg, is exposed to vapour at 100°C on one side and cooling water at 30°C on the opposite side. The heat transfer coefficients are:	7
	$h_i = 14200 \text{ w/m}^2$ - deg on vapour side	
	$h_o = 2325 \text{ w/m}^2$ - deg on the water side	
	Determine rate of heat transfer, the overall heat transfer coefficient and the drop in temperature at each side of heat transfer.	
Q-5	What is counter flow?	2
Q-6	Describe the mechanism of heat conduction in the metal.	2

Q-7	The rate of condensation of steam per meter length of the tube.	3
Q-8	Stainless steel balls of 4mm diameter, initially at 30°C, are heated for 1min with air at 95°C with a surface heat transfer coefficient of 40 w/m²°C and then cooled in 20°C with a surface heat transfer coefficient of 20 w/m²°C for 1 min. What is the temperature of the balls when they are removed from the cool air.	7

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Date of issue ASSINMENT UNIT-I-ME-602-PPE Date of submission

Q-1	Enumerate the major sources of energy.	2
Q-2	Differentiate between renewable and non-renewable sources of energy.	2
Q-3	Describe an open cycle and closed cycle MHD power	3
	generation?	
Q-4	Explain in brief the different methods of firing the coal.	7
Q-5	With the help of neat diagrams, discuss a condensing and	7
	non-condensing steam power plants.	

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Date of issue ASSINMENT UNIT-I-ME-603-CNE Date of submission

1.	Specify a centre lathe and show a block sketch of a lathe . name different part and	
	write about their function.	
2.	Explain classification of machine tools.	
3.	Write in brief about the various types of lathe chucks.	
4.	Write in about different lathe operation	
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