

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Winter Examination – 2022 Course: B. Tech. Branch : Electronics Engineering Semester : VII Subject Code & Name: Process Instrumentation (BTEXPE703D) Max Marks: 60 Date: 01/02/2023 Duration: 3 Hr.			
Instructions to the Students: 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question. 3. Use of non-programmable scientific calculators is allowed. 4. Assume suitable data wherever necessary and mention it clearly.			
		(Level/CO)	Marks
Q. 1	Solve Any Two of the following.		12
A)	What are the controlled and manipulated variables in heat exchanger control?	Understand	6
B)	Explain Heat Exchanger Control Strategies in details	Understand	6
C)	Explain types and operation of dryers.	Understand	6
Q.2	Solve Any Two of the following.		12
A)	What are the operations of evaporators? And Explain Types evaporators?	Understand	6
B)	What is crystallization operation? What are the types of crystallization?	Understand	6
C)	How can crystallization be controlled?	Understand	6
Q. 3	Solve Any Two of the following.		12
A)	What is the basic operation of distillation column?	Understand	6
B)	How do you control the bottom composition of a distillation column?	Understand	6
C)	What is reflux ratio control? What controls the reflux in distillation?	Understand	6
Q.4	Solve Any Two of the following.		12
A)	What is the operation of reactor? What are the different types of reactors?	Understand	6
B)	How do you control the surge on a centrifugal compressor?	Understand	6
C)	Explain safety interlocks? What does a Burner Management System do?	Understand	6
Q. 5	Solve Any Two of the following.		12
A)	What are the operations of pumps? What are the types of pumps?	Understand	6
B)	What is the operation of compressors?	Understand	6
C)	What are the methods of capacity control of centrifugal compressor?	Understand	6
*** End ***			