

**R09**

Code No: 58019

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year II Semester Examinations, May - 2015****PLANT LAYOUT AND MATERIAL HANDLING****(Common to ME, AME)****Time: 3 Hours****Max. Marks: 75****Answer any Five Questions  
All Questions Carry Equal Marks**

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- 1.a) Explain systematic layout design procedure for scooter manufacturing.  
 b) What problems can be envisaged in case layout is not appropriate? [8+7]
- 2.a) Compare design principles of process layout with product layout.  
 b) Describe fixed position layout with schematic diagram and list out its advantages. [7+8]
3. Consider the following problem for demonstrating the algorithm ALDEP  
 Basic data;  
 i) Number of departments in the layout = 6  
 ii) Areas of departments  
 iii) The Relationship Chart

Department	Function	Area (sq.meters)
1	Receiving	24000
2	Milling	12000
3	Press	12000
4	Assembly	16000
5	Painting	12000
6	Shipping	12000

From

1	-					
2	A	-				
3	E	U	-			
4	I	E	O	-		
5	A	I	I	I	-	
6	U	I	O	U	A	-
7	I	U	U	O	I	E
To	1	2	3	4	5	6