



Subject Code: PC501IT				AY:2024-25
	<b>MATRUSRI ENGINEERING COLLEGE</b> <b>(An Autonomous Institution)</b> <b>16-1-486, Saidabad, Hyderabad-500059</b> <b>(Approved by AICTE, Affiliated to Osmania University)</b>			
<b>Department of Information Technology</b>				
<b>B.E. V-SEM Assignment -V</b>				
<b>Subject: AT (PC501IT)</b>			<b>Marks: 10 M</b>	
<b>S.No.</b>	<b>Questions</b>	<b>Marks</b>	<b>BL</b>	<b>CO</b>
1	Construct a Turing machine for Language $L=a^n b^m c^n$ , where $m,n>0$ .  Show an ID for the string 'aabbcc' with tape symbols.	2 M	L2	CO5
2	Explain the various types of Turing machine	2 M	L4	CO5
3	Consider the correspondence system as given below  $A = (b, bab, ba)$ and $B = (b, ba, a)$ . The input set is $\Sigma = \{0, 1\}$ . Find the solution.	3M	L4	CO5
4	Does PCP with two lists $x = (b, a, aba, bb)$ and $y = (ba, ba, ab, b)$ have a solution?	3 M	L4	CO5