



# ABES Engineering College, Ghaziabad

Affiliated to Dr. A.P.J Abdul Kalam Technical University, Lucknow

## Department of CSE-Data Science

Assignment No.2	
<b>Subject:</b> Application of Soft Computing (KCS-056)	
<b>Submission Date:</b> 24.11.2023 (Friday)	
<b>Faculty Name:</b> Ms. Shreya	<b>Sem &amp; Section:</b> 3 <sup>rd</sup> & A,B,C
<b>Note: Attempt all Five Questions</b>	
<b>5*4=20</b>	
Q. No.	Questions
1	Explain Back Propagation algorithm and factors that may affect the back propagation neural network.
2	Explain Fuzzy relations and fuzzy to crisp conversion in detail.
3(a)	Discuss in detail how crisp logic is different from fuzzy logic.
3(b)	Consider set $X = \{2,4,6,8,10\}$ . Find its power set, cardinality, and cardinality of power set.
4	Explain the different types of operations used in fuzzy sets with suitable examples.
5	Explain crisp relation and fuzzy relation also write down different operations performed in these two relations.