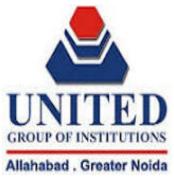
## Assignment on

Application of Soft Computing



Department of Computer Science and Engineering United College of Engineering and Research Prayagraj, UP, India

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## Assignment of Soft Computing Part-A $\overline{S.No}$ . Questions BloomsCourse Tex-Outoncomes omy Level 1 What are the aims of using soft computing? L1CO1 2 L1 CO1 Who initiated the idea of Soft Computing? 3 What is Soft Computing? L1CO1 4 Difference between BNN and ANN? <u>L4</u> CO1 5 Explain the meaning of term "Artificial Intelligence"? L2CO1 6 What is artificial neurons? L1CO1 7 What are the 2 types of learning? CO<sub>1</sub> L18 What do you mean by hard computing? CO1 L19 Why is Soft Computing important? $\overline{L1}$ $\overline{\text{CO1}}$ 10 CO1 What are the major 4 parts of the neuron? L111 What is Synaptic Transmission? L1CO1 12 Name any 4 types of Neurotransmitters? L2CO1 13 What is electrical communication in neurons? L1CO<sub>1</sub> 14 what do you understand by Action potential? L2CO1 15 Define the term Artificial Intelligence (AI). L1CO1 16 Give an example of system that: a. Acts like humans L2CO1 17 State atleast two characteristics of neural networks? L1CO1 18 what are the Types of transfer functions? L1CO<sub>1</sub> $\overline{\text{CO1}}$ 19 Define the term. Biological Neural network? L120 What is activation function? L1CO1 21 The foundation of AI was laid with the development of L1CO1 theory? 22 - networks were used to stimulate brain functioning. L1 CO1 23 Distinguish between Biological neuron and Artificial neuron? L4 CO1 Define the term Artificial Neural network? 24 L1CO1 $\overline{25}$ What is chemical communication in neurons? L1CO<sub>1</sub>

Part-B				
S.No.	Questions	BloomsCourse		
		Tex-	Out-	
		on-	comes	
		omy		
		Level		
1	What is Soft Computing? Explain how it is different from hard	L1	CO1	
	computing?			
2	How do Neurons Communicate?	L2	CO1	
3	What is neural network, explain its types also?	L1	CO1	
4	What are the Fundamental Types of Neurons?	L1	CO1	
5	Explain the meaning of term "Artificial Intelligence"?	L2	CO1	
6	State at-least two points of difference between: a. Systems that	L4	CO1	
	thinks like human and systems that act like human. b. Systems			
	that thinks like human and systems that thinks rationally.			
7	"Hard computing and soft computing are dependent on each other."	L5	CO1	
	Justify the statement.			
8	"Soft computing plays an important role in science and engineer-	L5	CO1	
	ing." Justify			

Part-c				
S.No.	Questions	BloomsCourse		
		Tex-	Out-	
		on-	comes	
		omy		
		Level		
1	Explain Biological Neural network in terms of Axom, Synapse, den-	L2	CO1	
	drites, Synaptic Gap?			
2	What is the convergence criterion of genetic algorithm?	L1	CO1	
3	Write major difference between Auto-associative and Hetro-	L3	CO1	
	associative memory?			
4	Briefly explain the nerve structure with the help of diagram?	L2	CO1	
5	Discuss three basic types of neuron connection architecture with	L2	CO1	
	digram?			

Signature of faculty member:
Signature of HoD.