## SYMBIOSIS INTERNAITONAL (DEEMED UNIVERSITY)

## Ph D ENTRANCE TEST

## The Sample Questions of Artificial Intelligence and Machine Learning

Question Number	Question text	Option 1	Option 2	Option 3	Option 4	Correct Option
1	The largest eigenvalue of the matrix $\begin{bmatrix} 2 & 3 & 4 \\ 1 & 1 & 1 \\ 2 & 2 & 2 \end{bmatrix}$ is	1	2	3	4	Option 3
2	Which method is appropriate for choosing the k value in K-Means clustering algorithm?	Elbow Method	Random Assignment	Fixed k value	ARCH Method	Option 1
3	What is the order of elements (from index 0 to size-1) in the hash table for the numbers (34, 56, 12, 24, 89) with table size 10.	[12, None, None, 34, 24, 56, None, None, 89]	[None, 12, None, 34, 24, 56, None, 89, None]	[None, None, 12, 34, None, 24, 56, None, None, 89]	[None, None, 12, None, 34, 24, 56, None, None, 89]	Option 4
4	What is the role of primary key in database?	A unique identifier for a last row in a table.	A unique identifier for a row in a table.	A unique identifier for entire database.	A unique identifier for entire table.	Option 2
5	What is the output of the following? X = "SITAIML" X[::-1]	SITAIML	L	ML	LMIATIS	Option 4