GLS UNIVERSITY
FACULTY OF COMPUTER APPLICATIONS AND INFORMATION TECHNOLOGY
BCA SEM III
Data Structure
Theory Assignment – 3

Q-1	**Fill in the Blanks:**
1.	A_____is a sequence of data structures which are connected together vialinks.
2.	Each link contains a connection to another_____.
3.	Each Link of a linked list contain a link to next link called_____.
4.	In linked list each node can be divided into_____parts.
5.	First node of the linked list is known as _____.
6.	_____field stores address of the next data item in the Linked List.
7.	Last Link carries a Link as_____in the singly linked list.
8.	_____type of linked list can be navigated forward and backward way.
9.	In_____type of linked list last item contains link of the first element as next and and first element has link to last element as prev.
10.	_____and_____type of applications can be created using linked list.
Q-2	**True or False:**
1.	Linked list is a non-primitive data structure.
2.	Each Link of a linked list can store a data called an element.
3.	A Linked List contains the connection link to the first Link called First.
4.	Each node can be divided into one part.
5.	Linked Field is the actual value that is stored and processed.
6.	Data Field is the address of the next data item in the Linked List.
7.	Each Link carries a data field(s) and a Link Field called next.
8.	Int Singly linked list Last Link carries a Link as not null to mark the end of the list.
9.	In doubly linked-list Items can be navigated forward and backward way.
10.	In single linked-list Item Navigation is backward only.
Q-3	**Answer the following questions:**
1.	What is linked list ? Explain with example.
2.	Explain the types of linked-list. 1. Single 2. Circular 3. Single Circular 4. Double Circular
3.	Explain structure of the linked-list with creating nodes. 1. Single 2. Circular 3. Single Circular 4. Double Circular
4.	Explain the representation of linked-list.
5.	Explain the representation of Stack and Queue using Linked List.