ITM(SLS) Baroda University
School of Computer Science, Engineering and Technology
Semester VI

-: Question Bank :-

Course Name : Data Structures And Algorithms
Course Name : C2620C1
Years : 2019
Chapters : 3 , 4
Total Questions : 15

- ## Questions :-

1. Explain the working of the Prim's algorithm with suitable example. **(Chapter : NonLinear Data Structure)**
2. List out graph traversal techniques & explain any one using suitable example. **(Chapter : NonLinear Data Structure)**
3. Apply Djkstra's algorithm on following graph with Node A as the starting node. **(Chapter : NonLinear Data Structure)**
4. Given Inorder and Preorder traversal, find Postorder traversal. Inorder:Y B K C F A G X E D H Z Preorder:G B Y A C K F X D E Z H **(Chapter : NonLinear Data Structure)**
5. Draw a Binary expression tree for the following and perform preorder traversal: a * (b + c) + (d * e) / f + g * h **(Chapter : NonLinear Data Structure)**
6. Explain insert and delete operations in AVL trees with suitable examples. **(Chapter : NonLinear Data Structure)**
7. Define: i) Cyclic Graph ii) Siblings iii) Strictly Binary Tree **(Chapter : NonLinear Data Structure)**
8. Explain collision in the context of hashing? Discuss collision resolution techniques. **(Chapter : Hashing And File Structure)**
9. Explain indexing structure for index files. **(Chapter : Hashing And File Structure)**
10. Explain Sequential file organizations and list its advantages and disadvantages. **(Chapter : Hashing And File Structure)**
11. Describe indexing structure for index file. **(Chapter : Hashing And File Structure)**
12. Define hash function. Describe any two hash methods with example. **(Chapter : Hashing And File Structure)**
13. What is hash function used for? Give one example of a hash function. **(Chapter : Hashing And File Structure)**
14. Explain Sequential Files and Indexed Sequential Files Structures **(Chapter : Hashing And File Structure)**
15. Create 2-3 Tree for the following sequence: 50, 100, 150, 200 **(Chapter :**

NonLinear Data Structure)