7. Explain the follow ith examples :

(a) Merge sort ar complexity (8)

(b) Linear searc nd its advantages, disadvantage: complexity. (8)

UI /

8. (a) What are Co ıs ? How are these harmful and lved ? Discuss with examples. (8)

(b) Explain direc ess files, their uses and advantag (8)

9. Explain the followi th examples :

(a) Multilist file, ses and advantages (8)

(b) Hashing func and their relative merits/demer (8)

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Roll No. .....

97674

B.C.A. 4th Semester Examination–May, 2017

Data Structure-II

Paper-BCA-207

Time : 3 hours ***Max. Marks : 80***

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Question 1 is **compulsory**. Attempt **four** more questions, selecting **one** question from each unit. All questions carry equals marks.

1. Answer the following questions briefly : [8×2 = 16]

(a) Discuss the complexity of Binary search.

(b) Write advantag Hashing.

(c) Describe two cations of general trees.

(d) Discuss major res of B-trees.

(e) Explain Variab gth records.

(f) Describe comp of Heap sort.

(g) Write the use a dvantages of Files.

(h) Discuss advan of Graphs.

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2. (a) What is Huffn algorithm ? How is it useful anc d ? Discuss with examples. (8)

(b) Discuss uses advantages of AVL search trees w iitable examples. (8)

3. Explain the follow riefly with suitable examples :

(a) B+ trees and t dvantages (8)

(b) Role of threads in Binary search trees (8)

UNIT-II

4. (a) What is traversal of Graphs ? How is it useful and used ? Explain with suitable examples. (8)

(b) Discuss Topological Sorting and its advantages with suitable examples. (8)

5. Describe the following with examples :

(a) Various operations on Graphs (8)

(b) Dijkstra algorithm for shortest path (8)

UNIT-III

6. (a) What is Quick sort? How is it used and useful ? Explain its complexity also with suitable examples. (10)

(b) Which sorting algorithm is the best on the basis of complexity and why ? (6)