

## Govt. Women Engineering College, Ajmer

## Department of Computer Science and Engineering

M. Tech. I Semester I Midterm October 2017

Subject: Advance Data Structure

Time: 12:00 – 01:00 PM

Subject Code:

Max. Marks: 25

Name of Student: Date of Examination: 10/10/2017

**Q.1** Draw the Voronoi Diagram of given points. Also discuss the application of Voronoi Diagrams.

Pints: (0,0), (10, 0), (20,10), (20, -10)

[5+2]

**Q.2** Explain the Graham's Scan algorithm using suitable example.

[6]

Q.3 Write short note on any one: (i) Persistence in Tree Type Data structure

(ii) Insertion in 2-3 Tree.

[5]

**Q.4** Show the red-Black Trees that result after successively deletion of key 8, 12 and 19 from given Red-Black Tree. Also write the required algorithm [7]

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