Included in the exam: Week6-Paths and Cycles up to the end.

Paths and Cycles

Definitions: Cut-set, Cut-vertex, Eulerian Trail, Hamiltonian Trail

On-Graph Questions: Fleury's Algorithm, Bellman-Ford's Algorithm

Trees

Definitions: Tree, Spanning Tree, Cycle Rank, Cutset Rank, Depth-first, Breadth-First Search

On-Graph Questions: Number of non-isomorphic trees with n vertices, Fundamental Set of Cycles

Planarity

Definitions: Two fundamental non-planar graphs(K3,3 and K5)

On-Graph Questions: Hemeomorphic Graphs, Abstract Dual Graphs

Coloring

Definitions: Chromatic Index

On-Graph Questions: Find Chromatic Number, Example on chemicals that must be kept separate, Chromatic Index of k-partite graphs

Digraphs

Definitions: Sink, Source, Transient, Persistent, Absorbing State

On-Graph Questions: Tournament analysis

Note: There may not be questions from all the subjects here. No questions outside these subjects.