Table 1: EE517 Network Analysis and Dimensioning Exam Topic List

Topic	2019	R	2018	R
Path Flows	✓		✓	✓
Link Incidence Matrix	✓	✓	✓	✓
Link Capacity Contraints	✓	✓	✓	✓
Routing Cost Minimisation	✓	✓	✓	✓
Flow Allocation Problem	✓	✓	✓	✓
Sketch of Feasible Region	✓			
Link Scaling Factor	✓			
Mean Packet Delay	✓			
Uncapacitated Dimensioning Problem	✓	✓	✓	
Shortest Path Allocation Rule	✓	✓	✓	✓
Decoupled Form of Uncapacitated Dimensioning Problem	✓			✓
Single Path Allocation Problem	✓		✓	
Path Labelling Scheme	✓	✓	✓	✓
RWA	✓	✓	✓	✓
Poisson pmf Mean and Variance	✓		✓	
Moment Generating Function	✓		✓	
Unconditional Waiting Time Distribution	✓			✓
Upgraded Queueing Model	✓			✓
WDM Dimensioning	✓	✓	✓	✓
Moe's Principle	✓	✓	✓	
Equivalent Random Method	✓			✓
Blocking Probability	✓	✓	✓	✓
Network Flow Allocation vs. Network Dimensioning Problem		✓		✓
Capacitated Flow Allocation Problem			✓	
Wavelength Continuity Contraint		✓	✓	
Markov Chain vs Ergodic Process vs Homogeneous Process		✓		✓
Transition Probability Matrix		✓		✓
Probability Calculation		✓		✓
Mean Wait Time in M/G/1		✓	✓	✓
Moments		✓	✓	
Mean System Delay		✓	✓	
Expected Busy Channels			✓	
Call Congestion		✓	✓	✓
Macro Cells		✓	✓	
Trunking Efficiency			✓	
Multi-Layer Network Dimensioning Problem				✓
Demand-Path-Identifier vs. Node-Identifier Notation				✓
Time vs. Call vs. Traffic Congestion			✓	✓