**Problem 1**

The traversal steps will be:

1. G -> E -> B -> A



1. Back track to B
2. B -> C -> F



1. Back track to F->C -> B -> E
2. E -> D



All nodes are visited now

The edge classification is show below



**Problem 2**

1. Explore node one edge away from I



1. Explore node two edge away from I



1. Explore nodes 3 edges away from I



1. Explore nodes 4 edges away from I



**Problem 3**

1. Initial graph, all nodes have D value as ∞, except for S



1. S comes into b, a and c, edges (S,a), (S,b) and (S,c) get relaxed



1. b comes into d, edges (b,d), (b,a) and (b,c) are relaxed



1. c comes to e and d, the edge (c,e) is relaxed

