2. What do you observe, and does this suggest any additions required to our gossip protocol (if so, what changes, otherwise, why not)?

The disconnected node appears unsynchronized. There should be a way for the nodes to let the disconnected node to catch up before rejoining the network. For example, the disconnected nodes can ask for missing blocks from other nodes when they reconnect to the network.

3. Notice that our node's list of peers is hard-coded in config.py. Does this suggest another missing component required to achieve a permissionless blockchain? Why not, or if so, what is the closest analogous message type in the Bitcoin p2p protocol documentation linked above?

The node's list of peers is hard-coded in config.py suggests that no other nodes can join the network without permission. In permissionless blockchain, nodes can dynamically join the network without a hard-coded permission list of nodes.

In Bitcoin p2p protocol, the closest analogous message type is "addr". "Addr" provides information on known nodes of the network. This message provides information for new nodes to discover other active nodes in the network and connect to them without relying on a predefined list of peers.