Q1

a) - The static route of 192.168.111.0/24 is physically and directly connected to the router ROUTER_EDGE on port Serial0/2/0.
- The static route of 192.168.121.0/24 is remotely connected to the router ROUTER_EDGE via the next hop address 192.168.151.2 and exit interface Serial0/2/0 of ROUTER_EDGE.

b) (i) ip route 0.0.0.0 0.0.0.0 211.7.7.14
ip route 0.0.0.0 0.0.0.0 211.7.7.10 5

The administrative distance of the floating default static route is assumed to be 5.

(ii) - Default static route is used as a primary route or path for forwarding all the packet in which the address is not in the routing table while floating default static route is used as a backup path to a primary static or dynamic route for handling when the primary static route is not available.
- The administrative distance of default static route is always lower than the floating default static route.

c) (i) ip route 192.168.141.0 255.255.255.0 G0/0/0 192.168.131.2

(ii) - 192.168.141.0 indicates the destination network address to be reached.
- 255.255.255.0 indicates the subnet mask of the destination network address.
- G0/0/0 indicates the exit interface of the router ROUTER_EDGE.
- 192.168.131.2 indicates the next hop address.

Q2

(a) ip route 0.0.0.0 0.0.0.0 s0/0/0
(b) ip route 172.16.0.0 255.255.248 192.168.2.2
(c) ip route 192.168.1.0 255.255.255.0 s0/0/0
(d) ip route 172.16.4.0 255.255.255.0 g0/0 172.16.3.2
  ip route 172.16.5.0 255.255.255.0 g0/1 172.16.2.2