Name: Bholanath Dey Roy

Roll: 22

R3) Path loss is due to attenuation of the electromagnetic signal when it travels through matter. Multipath propagation results in blurring of the received signal at the receiver and occurs when portions of the electromagnetic wave reflect off objects and ground, taking different paths ~~be~~ of different lengths between a sender and receiver.

R4) a) Increasing the transmission power

b) Reducing the transmission rate.

R10) No, there wouldn't be any advantag
Suppose there are two stations that want to transmit at the same time, and they both use RTS/CTS.

R13) False

R15) UMTS to GSM and CDMA-2000 to IS-95

R16) The data plane role of eNodeB is to forward datagram between UE and the P-GW.

The mobility management entity (MME) performs connection and mobility management on behalf of the UEs resident in the cell it controls.

P13) Base station acts as a wireless access point and provides radio links between mobile devices and core network.

In the control plane, the base station communicates directly with MME, and HSS.

In the data plane, the base station communicates with SGW, PDN, and Gateway routers.

P15) HSS is responsible for user authentication and authorization access to selected services. HHS commonicates with MME, SGW, and PGW in the control plane. In the data plane it does not communicate.

R16) MME: Main role is to manage mobility related functions, like authentication and security.

In the control plane it communicates with HSS and SGW.

In data plane it does not communicate with other network elements.

P28) Soucne base station ; MME

P29) Before and during the handover, the mobile devices receives datagrams from source base station. After the handover, the source base station will stop forward datagrams to the device and instead forward dny tunneled datagrams to the target base station.

P5) a) Two APs will typically have different SSIDs and MAC addresses.

b) Now if two wireless stations in different ISPs transmit at the same time, there will not be a collision.

P6) Suppose that wireless station H1 has 1000 long frames to transmit. (H1 may be an AP that is forwarding an MP3 ~~file~~ to some other wireless station).

P7) DIFS + RTS + SIFS + CTS + SIFS + FRAME + SIFS + ACK

= DIFS + 3SIFS + 1194.52 usec

P11) a) No

b) Yes

c) The time it takes for a router to learn path depends on number of hops

P12) Handover will increase end-to-end delay.