4.

a. In 1C the DSBSC signal when active looks like the carrier signal. In 2C every time the message signal increases the DSBSC signal looks like the carrier signal. In 3C the DSBSC signal looks like a pulse of the carrier signal where it starts from 0 and slowly increase to look like the carrier signal before it starts decreasing and heading to zero again.

b. In 1D the DSCST signal looks like a smaller version of the carrier signal when the message signal is zero. Same with 2D except that at every increase in the message signal it also increases the size of the DSCST signal. In 3D the signal never flat lines to zero. The carrier signal gets shrunk down and made to look like a wave due to the message signal.

C. In 1E the FM signal is the same as 1C except instead of flat lining at zero its flat lines a one. 2E is the same as 1E also but it has a higher frequency. The frequency also increases as the message signal increases. In 3E you can see when the signal changes phase at the beginning but as the frequency increases as time goes on and it get hard to see the phase change.

d. The PM signal in 1F looks like the opposite of the message signal. When the message signal is one the PM signal is zero. Same can be said about the PM signal on 2F. On 3F you can see the phase changes and as you get closer to the phase change the frequency decreases and as you go away from the phase change the frequency increase.