Bold indicates candidate keys

1. No, because there is no occurrence of C 🡪 D in G, but there is one in F.
2. Every dependency has a single attribute for its right-hand side   
   A 🡪 B  
   A 🡪 C  
   A 🡪 D  
   E 🡪 G  
   E 🡪 H

C 🡪 D  
AE 🡪 J   
  
Determine there are an redundant attributes on the left-hand side  
None

Look for redundant FD  
A 🡪 B  
A 🡪 C  
E 🡪 G  
E 🡪 H  
C 🡪 D  
AE 🡪 J  
Minimal Cover: {A 🡪 BC, E 🡪 GH, C 🡪 D, AE 🡪 J}

1. 1 (a): AB 🡪 C: superkey   
    C 🡪 D   
    C 🡪 A   
   It is in 3NF  
   1 (B): AB 🡪 C: superkey   
    C 🡪 D   
    C 🡪 A   
   It is in BCNF   
     
   2 (a): ACE 🡪 B: superkey  
    ACE 🡪 D: superkey   
    B 🡪 C

It is in 3NF

2 (b): ACE 🡪 B: superkey  
 ACE 🡪 D: superkey   
 B 🡪 C

It is in BCNF