Ans to the Q. no. I

Given,

Relation $R(A, B, C, D, E, F, G)$

Functional dependecies;

$A \to BC$
$BC \to DE$
$D \to F$
$CF \to G$

So, the closen set of A, B, C, D, CF

one

$A^+ \to ABCDEFG$

$BC^+ \to ABCDEFG$

$D^+ \to DF$

$CF^+ \to CFG$

So, here, the super key is A and
which is also candidate key.

Ans: to the Q: no-2

Given Relation $R(E, F, G, H, I, J, K, L, M, N)$
functional dependencies.

$$EF \rightarrow G$$
$$F \rightarrow IJ$$
$$EH \rightarrow KL$$
$$K \rightarrow M$$
$$L \rightarrow N$$

Here, $EF^+ \rightarrow EFGIJ$

$F^+ \rightarrow FIJ$

$EH^+ \rightarrow EHKLMN$

$K^+ \rightarrow KM$

$L^+ \rightarrow LN$

So, $EFH^+ \rightarrow EFGIHJKLMN$

The superkey is EFH. EFH also
candidate key.

Ans: to the q'. no - 3

Given relation, R(A,B,C,D,E,H)
functional dependencies,

$$A \rightarrow B$$
$$Be \rightarrow D$$
$$E \rightarrow C$$
$$D \rightarrow A$$

Here, $A^+ \rightarrow AB$

$$Be^+ \rightarrow BCDA$$
$$E^+ \rightarrow EC$$
$$D^+ \rightarrow DAB$$
$$H^+ \rightarrow H$$

$BCEH^+ \rightarrow ABCDEH$, $DEH^+ \rightarrow ABCHEH$

So, both BCEH and DEH are super

Key Here DEH is candidate key.