Quiz 3

```
 ┌──────────────┐              ┌──────────────┐
 │   U max      │              │              │
 │   s.t. BC    │              │              │
 └──────┬───────┘              └──────┬───────┘
        │                             │
 ┌──────┴───────┐              ┌──────┴───────┐
 │ Marshallian  │──────────────│ Hicksian     │
 │ Di(p1, p2, I)│              │ DiC(p1, p2, U)│
 └──────┬───────┘              └──────┬───────┘
        │                             │
 ┌──────┴───────┐              ┌──────┴───────┐
 │              │              │ Expd. fct.   │
 │              │──────────────│ E(p1, p2, U) │
 └──────────────┘              └──────────────┘
```
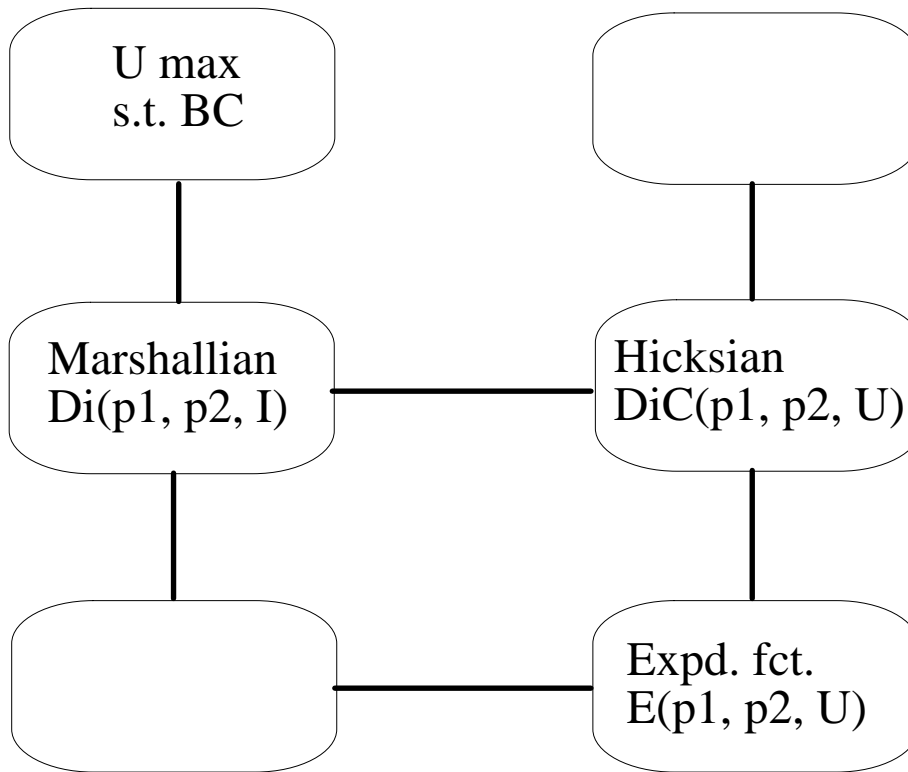
a) Fill in the two empty boxes above.

b) There are two ways to get from a given expenditure function E(p1, p2, U) to the uncompensated Marshallian demand functions. Describe one of them step by step (so that we can follow your instructions).

c) How can you obtain the Slutsky matrix of substitution effects

$$
\begin{pmatrix}
\dfrac{\delta D_1^C}{\delta p_1} & \dfrac{\delta D_1^C}{\delta p_2} \\[2ex]
\dfrac{\delta D_2^C}{\delta p_1} & \dfrac{\delta D_2^C}{\delta p_2}
\end{pmatrix}
$$

directly from the expenditure function? Again, don't calculate anything - only explain.