Answer guidelines for Sensor of Spring 2005, ECON4330

1.

a. (10) $f = \frac{\sigma_{ep}}{\sigma_{ee}} + \frac{1}{R\sigma_{ee}}\left(i_* + \mu_e - i\right)$ eqns. 2.8 AR. First part is f-m and second part f-s.

b. (15, 3 each) (i) f-s falls (ii) f-s falls (iii) both f-m and f-s rise (iv) r falls and f-s rises (v) f-m falls.

c. (5) Lower i but this may not be enough; tax revaluation gains; introduce inward capital controls; raise perception of exchange rate risk; tax exports; raise domestic costs of production.

2. a. (20) E overshoots because D. assumes uncovered interest parity (uip) and sticky P. Monetary shocks cause i to vary. Because of uip expected exchange rate change has to adjust. Hence need for overshooting to ensure appropriate movement in e.

b.(5 each) (i) Because of monopolistic competition and mark-up pricing firms can engage in pricing to market so as to preserve market shares. Hence import prices may not be affected much. Applies in reverse to export prices. (ii) $R = \frac{EP_*}{P}$. If E rises but there is little pass through to P then R rises. Conforms to empirical finding of R and E being highly correlated indicating the P is sticky.

3. a. (25) Refer to model p.141-45 in AR and basic phase diagram in Fig. 5.6. $\bar{N} \downarrow \Rightarrow \varpi \uparrow \cap Y \downarrow$ in new long run equilibrium, E also higher. Phase lines $\dot{\varpi} = 0$ and $\dot{E} = 0$ w shift up and to the right respectively. Nominal W is sticky. Transition characterized by system jumping to new saddle path with real wages lower and E higher, and thereafter moving along it to the new l-r equilibrium.

b. (15) Lower initial real wages causes Y to be higher than its l-r equilibrium level so as to initiate via Phillips curve the real wage increasing dynamics. Higher Y increases C by less so there is a reduction in foreign debt. As foreign debt declines, C increases more. In the meantime, Y begins to fall back to its new l-r level, while C continues to rise. Long-run effect on C is ambiguous because there are two effects: that of Y, which pulls it down, and that of W_* which pulls it up. If latter falls sufficiently, interest payments on debt could fall sufficiently so that in the end C may even be higher than before despite a lower Y. But if during the transition, C exceeds Y sufficiently long then fall in foreign debt reverses and foreign debt outcome could be higher. C would then definitely be lower.