(1) $\dddot{y} - 3\ddot{y} - 6\dot{y} - 9y = 2\ddot{u} - \dot{u} + 5u$ Find the state and output equations of the given model by using Jordan form.

(2) $\dddot{y} - 3\ddot{y} - 6\dot{y} - 9y = 2\ddot{u} - \dot{u} + 5u$ Find the state and output equations of the given model by using observable canonical form

(3) $\ddot{y} + 5\dot{y} - 2y = \dot{u} + 2u$ Find the state and output equations of the given model by using observable canonical form

(4) $\dddot{y} - 3\ddot{y} + 4y = \dot{u} - u$ Find the state and output equations of the given model by using Jordan form