

answer  
 $e^{(-\lambda)y} = e^{-\lambda} e^{(y)\log \lambda} 1 y^! e^{(y)\log \lambda - \lambda}$  Substituting terms with Exponential family function :  $p(y; \eta) = b(y) \exp[\eta^T T(y) - a(\eta)]$  We can fit the terms in the function as :  $b(y) = 1 y^! \eta = \log \lambda T(y) = y a(\eta) = e^\eta$