Productive cough

Mr. C is a 60-year-old man who lives in Tika. He earns money by selling second hand cars and spare parts. He states that he has been coughing up about 1/4 cup of white sputum each morning for the past 20 years. About 1 week ago, he noticed a sudden onset of shaking, chills, fever, sweating, and shortness of breath at rest. He also began coughing up rust colored sputum that was thicker than his normal sputum production. Mr. C admits to current consumption of two packs per day of cigarettes for the last 35 years. He admits to occasional alcohol use but denies having orthopnea, ankle edema, nausea, vomiting, diarrhea, weight loss, dysuria, wheezing, or hemoptysis.

O/E

Chronically ill–appearing elderly male in mild to moderate respiratory distress at rest; alert, oriented to person and place Temperature 39 C, heart rate 122/min, respiratory rate 32/min, blood pressure 96/60 mm Hg, height 150 cm, weight 65 kg no Cyanosis of the lips and mouth mild supraclavicular and cervical lymphadenopathy bilaterally; no jugular venous distention Cool, moist, and slightly dusky; cyanosis noted in fingertips; no clubbing or edema; pulses slightly diminished and symmetrical

- Chest. Anteroposterior diameter abnormally large, with diminished movement noted on right side with each inspiratory effort; diminished resonance to percussion and increased tactile fremitus noted over right lower lobe posteriorly
- Lungs. Bronchial breath sounds over right lower lobe posteriorly; clear but diminished breath sounds over entire left lung and right middle and upper lobes
 - 1. outline the problem list for this patient (i.e. all possible disease, abnormalities or complications present in this patient)
 - 2. order necessary investigation and indicate expected (possible abnormality)?
 - 3. outline plan of treatment for Mr. C (how you will manage Mr. C)?