You are provided with substance J which is an organic compound. Carry out the following tests to identify substance J.

| Test | Observation | Deduction |
|---|-------------|-----------|
| a) Burn a small amount of J on a | | |
| dry spatula end or dry porcelain. | | |
| | | |
| | | |
| b) To 1cm ³ of J, add an equal | | |
| volume of sodium hydroxide | | |
| solution. | | |
| | | |
| c) Shake 2cm³ of J with about 2cm³ | | |
| of water. Test the resultant solution | | |
| with litmus paper. | | |
| Divide the resultant solution into | | |
| three parts. | | |
| | | |
| i) To the first part, add 2-3 drops of | | |
| neutral iron(III) chloride solution | | |
| and heat. | | |
| | | |
| ii) To the good new odd a little | | |
| ii) To the second part, add a little sodium carbonate | | |
| powder. | | |
| powder. | | |
| *** | | |
| iii) To the third part, add 1cm ³ of | | |
| acidified potassium dichromate | | |
| solution and heat. | | |
| d) To 1cm ³ of J, add ammoniacal | | |
| silver nitrate solution and warm; | | |
| then allow the mixture to stand. | | |
| and the mixture to sturid. | | |
| | | |
| e) State the identity of J. | | |
| • | | |