(Soluble salts (practical preparation))

Q1.(2018)

- use magnesium oxide and sulfuric acid
- add sulfuric acid to a beaker
- warm sulfuric acid
- add magnesium oxide
- stir
- continue adding until magnesium oxide is in excess

- filter
- using a filter paper and funnel
- to remove excess magnesium oxide

- heat solution in an evaporating basin
- to crystallisation point
- leave to crystallise
- pat dry with filter paper

credit may be given for diagrams

Q2. (2020)

magnesium bromide

Q3. (2020)

sodium nitrate (solution)
or
silver nitrate (solution)
or
sodium iodide (solution)

Q4. (2020)

to remove / evaporate the water

Q5.(2023)

- use zinc carbonate and hydrochloric acid

- **add zinc carbonate to the (hydrochloric) acid**
- in a beaker
- stir

- **continue adding until the zinc carbonate is in excess**
- shown by excess solid
- and no more effervescence

- **filter (the reaction mixture)**
- to remove the excess zinc carbonate

- **heat the solution**
- using a water bath or electric heater
- to crystallisation point

- **leave the solution to crystallise**
- pat crystals dry with filter paper

Q6.a)(2024)

copper sulfate

water

Q6.b)(2024)

solid remains (in the mixture)

or

no more effervescence /
bubbles / fizzing

Q6.c)(2024)

to remove copper carbonate

Q6.d)(2024)

electric heater
or
water bath

Q6.e)(2024)

$$92.8 = \frac{\text{mass produced}}{12.5} \times 100$$

$$(\text{mass produced}) = \frac{92.8}{100} \times 12.5$$

$$= 11.6 \text{ (g)}$$

Q6.f)(2024)

(copper)
does not react with (sulfuric)
acid

(sodium)
could explode
or
could get too hot