- 1. Determination of Fluoride is based on
  - (a) Reaction of fluoride with SPADNS
  - (b) Reaction of fluoride with Zirconyl oxy chloride
  - (c) Reaction of fluoride with Zirconium SPADNS complex
  - (d) Reaction of fluoride with chloride
- 2. In the determination of Phenols by aminoantipyrene method
  - (a) Only the para substituted Phenols react
  - (b) Only the ortho substituted phenols react
  - (c) Only the meta substituted Phenols react
  - (d) Only para substituted Phenols do not react
- **3.** In a spectrophotometric method if an interfering Ion is present in the sample we:
  - (a) Add a precipitating agent
  - (b) Add another interfering agent
  - (c) Ignore and proceed
  - (d) Add a masking agent which does not interfere
- 4. Polyvinyl alcohol is added in the determination of Arsenic by Rhodamine B method
  - (a) To decompose the lon pair
  - (b) To react with Arsenic
  - (c) To reduce Arsenate
  - (d) To stabilize Ion pair
- 5. For determination of free chlorine in water, Potassium permanganate is used as a standard because
  - (a) It is cheap
  - (b) Chlorine is insoluble in water
  - (c) Chlorine is colored
  - (d) Permanganate solutions can be made reproducibly and its equivalence to free chlorine is known
- 6. In the determination of free chlorine in drinking water EDTA is a
  - (a) Colour masking agent
  - (b) Colour enhancing agent
  - (c) Stabilizing agent
  - (d) Masking agent for interfering ions
- 7. Boron should be determined in
  - (a) Pyrex glassware
  - (b) Borosilicate glassware
  - (c) Plastic ware
  - (d) Earthen ware
- **8.** In a water sample chloride is present to an extent of 1000 ppm. The calibration curve in the range of 0-6 ppm. To analyze sample using 10 ml standard volumetric flasks
  - (a) Dilute 10 times
  - (b) Dilute 1000 times
  - (c) Dilute 100 times
  - (d) Choose a different method
- 9. In the determination of magnesium by titan yellow method sodium hydroxide is added to
  - (a) Neutralize pH to 7.0
  - (b) To raise the pH to 10
  - (c) To raise the pH to 12
  - (d) To remove interfering ions

- **10.** In the determination of mercury by iodide rhodamine 6G method the solutions are diluted to about 7 ml before adding rhodamine 6G and PVA and making up to 10 ml. The reason for this is
  - (a) To form well dispersed ion pair for reproducible results
  - (b) To dissolve
  - (c) To reduce concentration of interfering ions
  - (d) To adjust pH