

## Value Based Questions (AMINES)

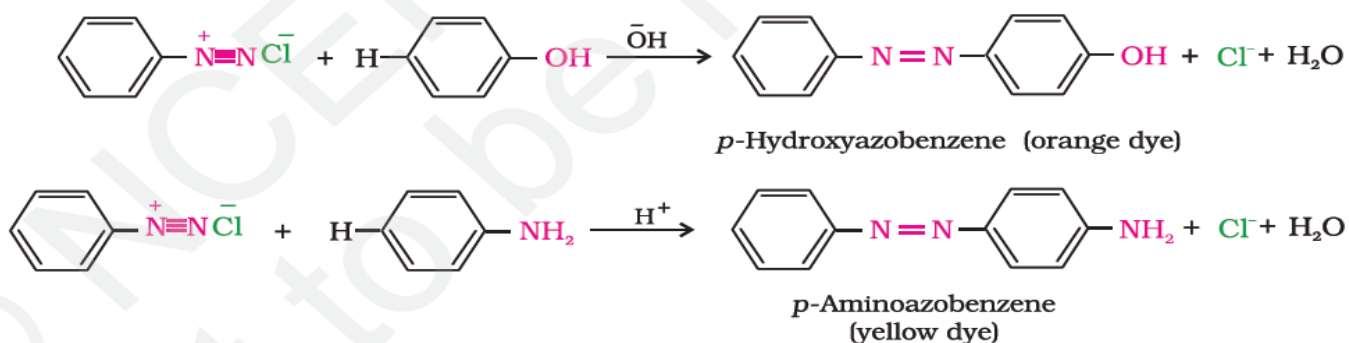
1) Sushil's friend wants to play Holi with synthetic colours, eggs, muddy water etc. Sunil persuades his friends to play Holi with natural colours. He reminds them that last time one of their friends had developed skin allergy after playing Holi with synthetic colours. It took him a long time to recover. Sushil's friends agreed and prepared natural colours using leaves and flowers.

(i) Mention the values shown by Sushil.

(ii) Write the names and reaction of preparation of two azo dyes (synthetic)

Ans (i) Environmental conservation, respect of multireligious and multicultural country.

(ii)



2) A mother brought her 2 year old child to a clinic with a complaint that the child would not stop crying and was profusely vomiting. The doctor noticed the child's shirt collar colour was faded.

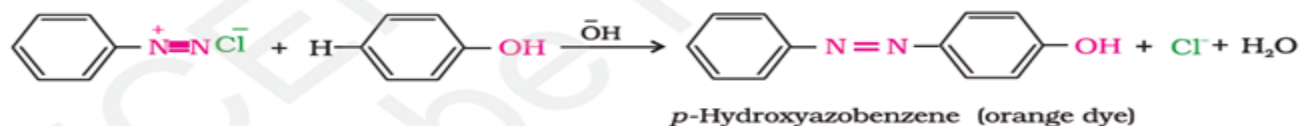
a) Why are dyes coloured? Give 2 reasons?

b) What is a coupling reaction? Give an equation.

c) What are the values involved in this?

Ans (a) Dyes are aromatic compounds; their structure includes aryl rings which have delocalised electron systems. These are responsible for the absorption of electromagnetic radiation of varying wavelengths transmitting the rest to the eye.

(b) Arenediazonium salts react with highly reactive aromatic compounds such as phenols and amines to form brightly coloured azo compounds. This reaction is called a coupling reaction.



(c) Keen observation.

Q3. In the colony shop, Pankaj saw a stranger exchanging goods and saw small packets bearing TNT. He informed his parents and finally the city police regarding the matter.

1. What is TNT?

2. How it is prepared?
3. What are values shown by Pankaj?

Ans:

1. Trinitrotoluene. It is and explosive.
2. By nitration of toluene.
3. Concern for society, friends, awareness, sensibility and application of knowledge.

Q4. Ravi's mother got her dupatta dyed with a brilliant green colour. His mother brought the semi-dry dupatta to home as she was in hurry. Ravi told her mother to dry it finest and then wash it before use.

1. Name the dye which gives brilliant green colour.
2. Why he advised her mother to wash the dupatta?
3. What values are shown by Ravi?

Ans:

1. Malachite green.
2. To remove harmful dye (chemical) sticking to it.
3. Concern and love for her mother, knowledge of chemistry and awareness.