

10

Mirror and Water Images

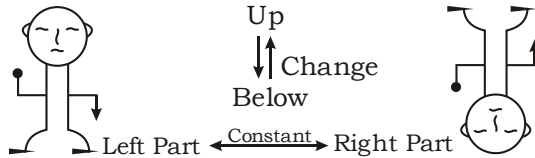
दर्पण एवं जल प्रतिबिम्ब

Questions are divided into two parts under the chapter 'Mirrors and Water Images'. On the left side a sample figure is given in the form of question figure and on the right side there are four answer figures.

Under it, a figure or design is made on a paper, which is called the question figure. The answer will be the figure or design which will look like the reflection of the question figure when it is seen in water or a mirror.

Important points

1. The reflection seen in water is similar to the sample figure.
2. The right and left side of any figure in its water reflection remains constant.
3. In the water reflection, the top and bottom part of any figure gets interchanged, which is known as vertical inversion.

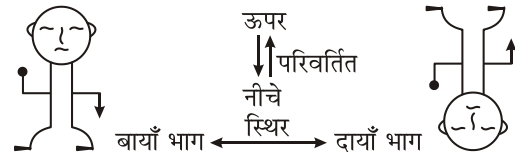


'दर्पण एवं जल प्रतिबिम्ब' अध्याय के अन्तर्गत प्रश्न दो भागों में बटे रहते हैं। बाईं तरफ प्रश्न आकृति के रूप में एक मूल आकृति दी गई रहती है तथा दाईं तरफ चार उत्तर आकृतियों दी गई रहती हैं।

इसके अन्तर्गत कागज के ऊपर एक आकृति या डिजाइन बनी होती है, जिसे प्रश्न आकृति कहते हैं। आपको प्रश्न आकृति में बनी आकृति या डिजाइन दर्पण अथवा जल में किस प्रकार से दिखेगी? उसे ही उत्तर आकृतियों में से एक को ज्ञात करना होता है।

महत्त्वपूर्ण बिन्दु

1. जल में दिखाई देने वाले प्रतिबिम्ब मूल आकृति के समरूप होते हैं।
2. जल प्रतिबिम्ब में किसी भी आकृति का दायाँ व बायाँ भाग स्थिर (constant) रहता है।
3. जल प्रतिबिम्ब में किसी भी आकृति का ऊपर व नीचे का भाग एक-दूसरे से स्थानान्तरित (interchange) हो जाता है, जिसे लम्बवत् उल्ट्रमण (vertical inversion) कहते हैं।



EXERCISE

Directions (Q. 1-20): In each of the following questions, a question entity is given on the left and four answer entities are on the right side. Choose one of the option which the water imate of the question entity.

निर्देश (प्र. 1-20): निम्नलिखित प्रत्येक प्रश्न में बाईं ओर एक प्रश्न आकृति तथा दाईं ओर चार उत्तर आकृतियाँ दी गई हैं। उत्तर आकृतियों में से एक ऐसी आकृति का चयन कीजिए, जिसमें प्रश्न आकृति का जल प्रतिबिम्ब बना हो।

1.

(A) (B) (C) (D)
2.

(A) (B) (C) (D)
3.

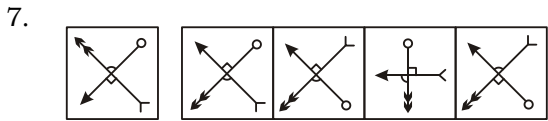
(A) (B) (C) (D)

4.

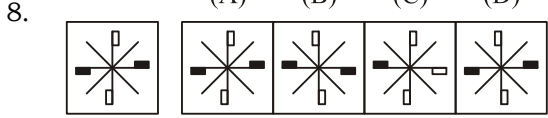
(A) (B) (C) (D)
5.

(A) (B) (C) (D)
6.

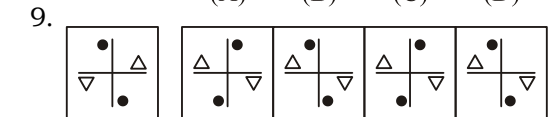
(A) (B) (C) (D)



(A) (B) (C) (D)



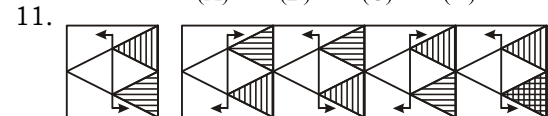
(A) (B) (C) (D)



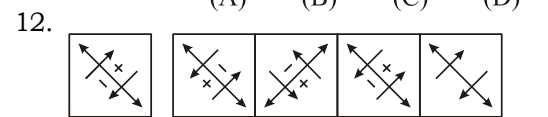
(A) (B) (C) (D)



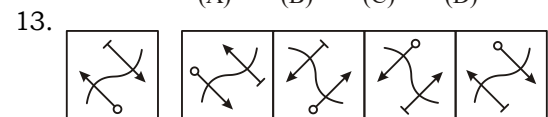
(A) (B) (C) (D)



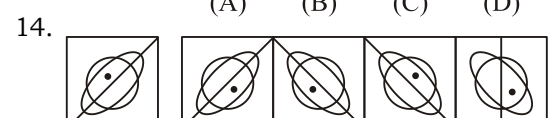
(A) (B) (C) (D)



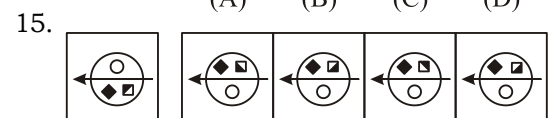
(A) (B) (C) (D)



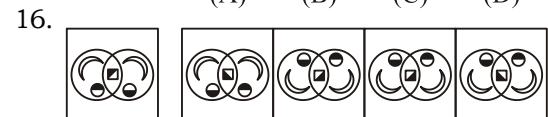
(A) (B) (C) (D)



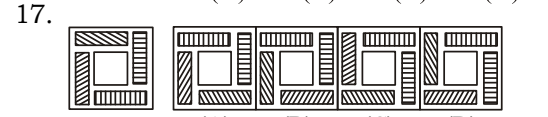
(A) (B) (C) (D)



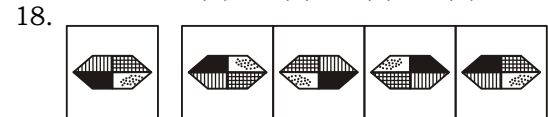
(A) (B) (C) (D)



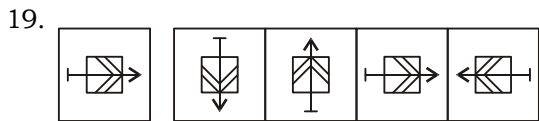
(A) (B) (C) (D)



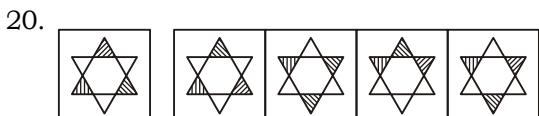
(A) (B) (C) (D)



(A) (B) (C) (D)



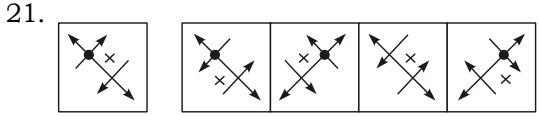
(A) (B) (C) (D)



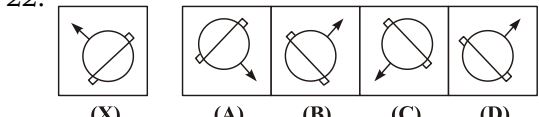
(A) (B) (C) (D)

Directions (Q. 21-40): Find the mirror image for figure from the given options for each of the following questions.

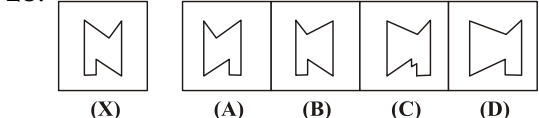
निर्देश (प्र. 21-40): निर्देश—निम्नलिखित प्रत्येक प्रश्न में आकृति 'X' के सही दर्पण प्रतिबिम्ब को चार विकल्पों (A), (B), (C) तथा (D) में से छाँटिए, जो इसके साथ दिए गए हैं।



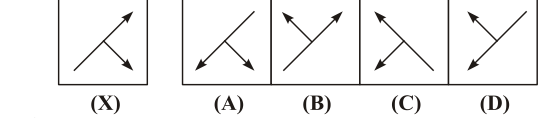
(X) (A) (B) (C) (D)



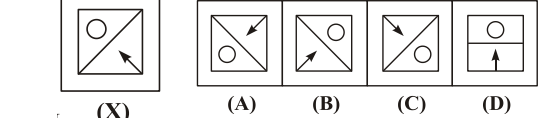
(X) (A) (B) (C) (D)



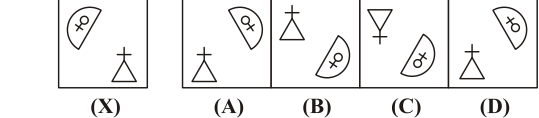
(X) (A) (B) (C) (D)



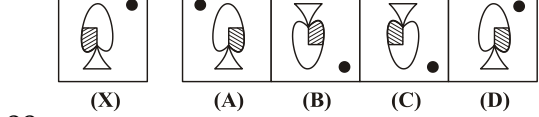
(X) (A) (B) (C) (D)



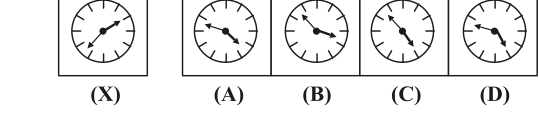
(X) (A) (B) (C) (D)

































(X) (A) (B) (C) (D)

































(X) (A) (B) (C) (D)



(X) (A) (B) (C) (D)

29.  (X)  (A)  (B)  (C)  (D)
30.  (X)  (A)  (B)  (C)  (D)
31.  (X)  (A)  (B)  (C)  (D)
32.  (X)  (A)  (B)  (C)  (D)
33.  (X)  (A)  (B)  (C)  (D)
34.  (X)  (A)  (B)  (C)  (D)

35.  (X)  (A)  (B)  (C)  (D)
36.  (X)  (A)  (B)  (C)  (D)
37.  (X)  (A)  (B)  (C)  (D)
38.  (X)  (A)  (B)  (C)  (D)
39.  (X)  (A)  (B)  (C)  (D)
40.  (X)  (A)  (B)  (C)  (D)