Boats and Streams-Exercise Questions updated on Dec 2024

1. A person can row 750 metres against the stream in 11 ¼ minutes and returns in 7 ½ minutes. The speed of the person in in still water is :

   a) 2 km/hr b)3 km/hr c)4km/hr d) 5 km/hr

2. If a man rows at the rate of 6 kmph in still water and his rate aginst the current is 4.5 kmph, then the man's rate along the current is

   a) 6 kmph b)7.5 kmph c) 6.5kmph d) 8 kmph

3. A boat moves upstream at the rate of 1 km in 20 minutes and down stream 1 km in 12 minutes. The speed of the current is :

   a) 1 kmph b)2 kmph c)3 kmph d)2.5 kmph

4. A man can row a boat at 10 kmph in still water and the speed of the stream is 8 kmph. What is the time taken to row a distance of 90 km down the stream ?

   a) 8hrs b)5 hrs c) 15 hrs d) 20 hrs

5. If athul rows 16 km upstream and 24 km down steam taking 4 hours each, then the speed of the stream

   a) 1kmph 2)kmph 3)1.5 kmph 12 kmph

Answer & Explanations

1. The speed in upstream = .75 * (4/45)*60 = 4 kmph

   The speed in downstream = .75 *(2/15) *60 = 6 kmph

   Speed in still water = ½(4+6) = 5 kmph

2. Let the rate along the current be x kmph

   Then, ½ (x+ 4.5) = 6 :. x = 7.5

3. Rate upstream = (1/20 *60) = 3 kmph

   Rate dowm stream = 1/12 * 60 = 5 kmph

   Rate of the current = ½ (5-3) = 1 kmph

4. Speed in down stream = 10 +8 = 18

   Time taken to cover 90 km down stream = 90/18 = 5 hrs.

5. Speed upstream = 16/4 = 4 kmph

   Speed down stream = 24/4 = 6 kmph

   Speed of stream = ½ (6-4) = 1 kmph