Boats and Streams questions are a common type of questions asked in competitive exams. These questions carry a weightage of 1-2 questions(2-4 marks) in SSC exams and 1-2 questions(1-2 marks) bank exams. To perform well in competitive exams, your concepts of Boats and Streams should be clear, as they can be time consuming if not practiced well.

Here are some tips for solving Boats and Streams questions: First, understand the basic concept that relates the speed of a boat, the speed of the stream, and the resultant speed of the boat in still water. Pay attention to direction, choose variables wisely, and ensure units are consistent. Practice with various scenarios to gain confidence in solving these types of problems.

So, we have attached 10 questions of Boats and Streams for you to practice with. You should aim to solve these questions in less than half a minute for each.

Practice Questions on Boats and Streams

You can also download the Boats and Streams questions and answers pdf. Just click on the **Download PDF** button. So let's start with the very first question.

Q:1 If the speed of a boat in still water is 10m/s and the speed of the stream is 3 m/s. What is the time taken by the boat to cover a distance of 210m in upstream motion?

1. 30 seconds

2. 24 seconds

3. 20 seconds

4. 45 seconds

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) This was an easy one. Did get it right?

Q:2 The speed of a boat in still water is 18 km/hr and the speed of current is 6 km/hr. In how much time (in hours) will a boat travel a distance of 90 km upstream and the same distance downstream ?

1. $9\frac{1}{2}$

2. $11\frac{1}{4}$

3. 12

4. 10

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) This was a simple one, don't get stuck in unnecessary calculations!

Q:3 A boatman can row 30 km against the stream in 6 hours and can row the same distance downstream return in 5 hours. Find the rate of current.

1. 0.5 km/h

2. 2 km/h

3. 2.5 km/h

4. 1.75 km/h

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) A question of seconds.....

Q:4 What is the speed of the boat in the still river when the boat can cover 20km of the upstream distance in 8 hours and the speed of the stream is 5km/h?

1. 2.5 km/h

2. 2.5 m/s

3. 7.5 km/h

4. None of these

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) It is not an easy one but I think now you're prepared for it.

Q:5 The upstream speed of a water boat is 6 km/hr and the downstream speed is 7.5 km/hr. Find the time taken by the boat to cover 30 km upstream and the same distance downstream.

1. 6 hours

2. 10 hours

3. 9 hours

4. 5 hours

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) We're halfway through. Have you got all your questions correct so far?

Q:6 A sailor was sailing at a speed of 15 m/s whereas the speed of a stream of 5 m/s. He travelled for 3 hours against the stream then he realised he passed his desired location so he travelled back for 30 minutes more in the direction of the stream. Find the total distance travelled by boat.

1. 126m

2. 172km

3. 144km

4. 126km

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) Should we raise the level of questions?

Q:7 Shyam can swim 10 km/hr in still water. If the velocity of the stream is 5 km/hr, then find the time taken by Shyam to swim to a place 90 km upstream and come back downstream to the starting point.

1. 44 hrs

2. 35 hrs

3. 24 hrs

4. 40 hrs

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Try using short tricks to save time..

Q:8 A boat covers a 48 km distance downstream in 4 hours. The speed of the stream is 3 km/h. If the speed of the boat is reduced by 50% then, find the time in which the boat will cover the same distance upstream.

1. 28 hours

2. 32 hours

3. 36 hours

4. 24 hours

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) This was a bit calculative one...

Q:9 A boat travels 160 km against a stream in 40 hours and the speed of the stream is 18 km/hr. What is the speed of the boat along with the stream?

1. 60 km/hr

2. 40 km/hr

3. 50 km/hr

4. 20 km/hr

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Try decreasing time in your calculations

Q:10 Ravi can swim 6 km/h downstream and 4 km/h upstream. Find the speed of Ravi in still water.

1. 5 km/h

2. 4 km/h

3. 6 km/h

4. 8 km/h

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) Did you guess them all correctly?

Answer Key

Let's check out your score in this test.

1. (1)	**2.** (2)	**3.** (1)	**4.** (3)	**5.** (3)
6. (3)	**7.** (3)	**8.** (2)	**9.** (2)	**10.** (1)

Comment below your score, considering each question has 1 mark only. If you scored 8 to 10, congratulations! You are one step closer to selection. If you have scored 5 to 8 marks, then you are doing well, keep it up. If you have scored less than 5 marks then you need to work a little harder on this subject. But don't worry, we are here to help you master the subject.

Let's check the answers and solutions and try to find out what went wrong.

Answers and Solutions

Q:1 The correct answer is **option 1** i.e. **30 seconds**

Upstream speed = speed of the boat in still water - speed of water

⇒ 10 - 3 = 7 m/s

Time taken = 210/7 = 30 seconds

Q:2 The correct answer is **option 2** i.e. $11\frac{1}{4}$.

Boat speed = 18 km/hr

Stream speed = 6 km/hr

Upstream speed = (18 - 6) = 12 km/hr

Downstream speed = (18 + 6) = 24 km/hr

Average speed = (2 × 12 × 24)/(36) = 16 km/hr

Time = 180/16 = 90/8 = $11\frac{1}{4}$

Q:3 The correct answer is **option 1** i.e **0.5 km/h**

Let the speed of boat be x km/h and speed of current be y km/h

According to question,

30/6 = 5 = x - y

30/5 = 6 = x + y

By subtracting both equation

2y = 1

y = 0.5 km/h

Short approach: Speed of current = (D - U)/2

Speed of boat = (D + U)/2 (Where D and U are speed of downstream and upstream)

Q:4 The correct answer is **option 3** i.e. **7.5km/h**

Speed of the boat in water = 20/8

⇒ 2.5km/h

Speed of the boat upstream = speed of the boat in still water - speed of the stream

⇒ 2.5 = Speed - 5

⇒ Speed = 7.5km/h

Q:5 The correct answer is **Option 3** i.e. **9 hours.**

$Speed_1$ (downstream) = 7.5 km/hr

$Speed_2$ (upstream) = 6 km/hr

Required time = 30/7.5 + 30/6 = (4 + 5) = 9

Q:6 The correct answer is **option 3** i.e. **144 km.**

Downstream Speed = (15 + 5) = 20 m/s

⇒ 20m/s or 72km/h

Upstream Speed = (15 - 5) = 10 m/s

⇒ 10m/s or 36km/h

Distance = (speed × time)

Upstream distance = (36 × 3) = 108 km

Downstream distance = 72 × (1/2) = 36

⇒ (108 + 36) = 144 km

Q:7 The correct answer is **option 3** i.e. **24 hr.**

According to the question,

Downstream speed, x + y = 15

Upstream Speed, x - y = 5

Time taken by Shyam = (90/15 + 90/5) = 2(6 + 18) = 24 hrs

Q:8 The correct answer is **Option 2** i.e. **32 hours.**

Downstream speed = 48/4 = 12 km/h

The speed of the stream is 3 km/h

So,

Speed of the boat in still water = (12 - 3) = 9 km/h

Now, the speed of the boat in still water is reduced by 50%

So, reduced speed of the boat in still water = 9 × 0.5 = 4.5 km/h

Hence,

Upstream speed = (4.5 - 3) = 1.5 km/h

So,

Required time = 48/1.5 = 32 hours

Q:9 The correct answer is **option 2** i.e. **40 km/hr.**

Let the speed of the boat in still water be 'x' km/hr and the speed of the current be 'y' km/hr

Upstream speed, x - y = 160/40= 4 km/h

⇒ x - 18 = 4

⇒ x = 22 km/h

Speed downstream, x + y = 40 km/hr

Q:10 The correct answer is **option 1** i.e. **5 km/hr.**

Let the speed of Ravi in still water be 'x' km/h

The speed of the stream be 'y' km/h

Upstream speed = (x - y) kmph

Downstream Speed = (x + y) kmph

ATQ

⇒ (x + y) = 6.....(1)

⇒ (x - y) = 4.....(2)

On solving both equations, we get x = 5 km/h

So, this is it for today. We will meet again with another new topic. Till then, you can practice the questions again by downloading the PDF of Boats and Streams.