

Demo PDF file. This file includes questions: 10 from 70. Full version of file looks the same as demo, but full version includes all questions. You may download file with all questions by link on bottom of this page

Q373 - Navigation Problems: Chart Plot

1. The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes LMR = Lower Mississippi River UMR = Upper Mississippi River OHR = Ohio River ACOE = Army Corps of Engineers At 0630, on 15 March, you are upbound on the Lower Mississippi River passing Kaiser Aluminum & Chemical Corp. (mile 234.0 AHP). The latest available information on the channel conditions above Baton Rouge that includes the latest buoy information, as well as recommended courses, is found in the _____.

- Waterways Journal
- Corps. of Engineers maps
- **Local Notice to Mariners**
- Sailing Directions

Note:

Local Notice to Mariners provides the most current information on aids to navigation, channel conditions, and safety information for U.S. inland waters, including buoy updates and recommended courses.

2. You are upbound approaching Springfield Bend Lt. (mile 244.8 AHP) downriver from Profit Island. Which of the following statements is TRUE?

- Tow length must not exceed 600 feet to use Profit Island Chute.
- Tows must navigate toward left ascending bank when passing Profit Island Chute.
- Profit Island Chute is open to navigation and is a shortcut for single barge tows.
- **Profit Island Chute is closed to navigation.**

Note:

Profit Island Chute is closed to navigation; therefore, vessels must remain in the main river channel.

3. At 1218, on 16 March, you are passing the Vicksburg Gage (mile 437.0 AHP). What has been the average current since 0630, 15 March, if you have been making turns for 8.0 mph?

- 0.5 mph
- 0.2 mph
- **1.2 mph**
- 0.8 mph

Note:

The speed over ground was calculated as 9.2 mph, and subtracting the speed through the water (8.0 mph) yields an average following current of 1.2 mph.

4. Which of the following statements regarding buoys on the Mississippi River is TRUE?

- The buoys do not shift positions due to permanent moorings.
- **Buoy positions on the chart are approximate.**
- The buoys are maintained on station year round.
- The positions of river buoys can be found in the latest edition of Light List-Vol. V.

Note:

Buoy positions on the Mississippi River charts are approximate due to the dynamic nature of the river and the buoys' floating moorings, which allow for movement with currents and shifting channels.

5. What is the mile point of the Rosedale, MS Gage?

- 554.2 AHP
- **592.2 AHP**
- 632.5 AHP
- 663.0 AHP

Note:

The Rosedale, MS river gage is located at Mississippi River Mile 592.2 Above Head of Passes (AHP), making option B the correct answer. River miles AHP increase upstream from Head of Passes, and this specific value is a published reference point for the Rosedale gage.

6. The highest point on your towboat is 53 feet above the water, and the Helena Gage (mile 663 AHP) reads 3.9 feet. What is the vertical clearance when you pass under the B-span of the Helena Highway Bridge in Helena?

- 59.9 feet
- 64.1 feet
- 65.5 feet
- **62.5 feet**

Note:

The vertical clearance is determined by subtracting the current river stage (3.9 feet) from the charted bridge clearance (66.4 feet), resulting in a clearance of 62.5 feet.

7. You are passing the Memphis Gage at 0405, 18 March. If you are turning for 8 mph and estimate the current at 2.3 mph, what is your ETA at Cairo Point, IL (mile 954.5 AHP)?

- **1839, 19 Mar**
- 1052, 19 Mar
- 1518, 19 Mar
- 0447, 19 Mar

Note:

Upstream travel requires subtracting the current from the speed, resulting in a ground speed of 5.7 mph. The distance of 219.8 river miles yields a travel time of approximately 38.56 hours, or 38 hours and 34 minutes. Departing Memphis Gage at 0405 on March 18th, adding this travel time results in an estimated arrival time of 1839 on March 19th.

8. At what time would you listen to VHF Channel 22 (157.1 MHz) for information concerning the stage of the river between Memphis and Cairo?

- 1815
- **1300**
- 1620
- 1435

Note:

The Coast Guard broadcasts river stage information for the Memphis–Cairo reach on VHF Channel 22 at 1300, as specified in exam reference materials.

9. As you approach French Point Light (mile 915.4 AHP), you see 2 daymarks on the structure. What significance do the daymarks have?

- They indicate the starboard side of the channel from seaward and a channel crossing.
- They indicate the starboard side of the channel from seaward and mid-channel fairway.
- They indicate the port side of the channel from seaward and a range marking.
- They indicate the port side of the channel and a channel crossing.

Note:

The presence of two daymarks on French Point Light indicates it serves both as a starboard-side channel marker from seaward and a channel crossing indicator.

10. What is the distance from Cairo Point, IL, to Arkansas City?

- 400 miles
- 28 miles
- 110 miles
- 218 miles

Note:

The distance from Cairo Point, IL, to Arkansas City is 400 miles, as indicated in the Western Rivers chart's mileage table. River distances are measured along the channel, not by straight-line or highway miles, and the correct answer is always the value provided in the chart or table.
