BLOGS

Clock Questions and Answers for CLAT Quantitative Aptitude

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Clock questions are a common part of many competitive exams. These questions test your ability to understand the movement of the hour and minute hands of a clock and calculate angles and positions.

Let's dive into ten clock questions similar to those you might encounter during CLAT.

CLOCK QUESTIONS FOR CLAT QUANTITATIVE APTITUDE

Question 1

The angle swept by the hour hand of a clock from 3 a.m. to 3 p.m.

(a) 360

(b) 180

(c) 270

(d) 90

Answer 1: (a) 360

Explanation: The hour hand of a clock completes a full 360-degree rotation in 12 hours. Therefore, from 3 a.m. to 3 p.m., it sweeps an angle of 360 degrees.

Question 2

The angle swept by the minute hand of a clock from 6 a.m. to 6:45 a.m.

(a) 180

(b) 210

(c) 270

(d) None of these

Answer 2: (b) 210

Explanation: The minute hand of a clock completes a full 360-degree rotation in 60 minutes. From 6 a.m. to 6:45 a.m., it sweeps an angle of (360/60) * 45 = 210 degrees.

Question 3

The angular value of a minute is

(a) 30 degrees

(b) 10 degrees

(c) 6 degrees

(d) Cannot be calculated

Answer 3: (a) 30 degrees

Explanation: Each minute on a clock represents 360 degrees divided by 60 minutes, which equals 6 degrees per minute. Therefore, the angular value of a minute is 6 degrees.

Question 4

A clock started at 3 p.m., and by 15 minutes past 6, the hour hand had turned through what degrees?

(a) 195/2

(b) 173/2

(c) 153/3

(d) 198/5

Answer 4: (a) 195/2

Explanation: The hour hand moves at a rate of 360 degrees in 12 hours, which is 30 degrees per hour. From 3 p.m. to 6:15 p.m., it has moved 3 hours and 15 minutes, which is (3 + 15/60) hours. Therefore, the angle covered is (30 * (3 + 15/60)) degrees, which simplifies to (30 * (195/4)) degrees or (195/2) degrees.

Question 5

If a clock starts at noon, then by how many degrees has the hour hand rotated when it is 7 p.m.?

(a) 230

(b) 210

(c) 180

(d) 190

Answer 5: (b) 210

Explanation: From 12 noon to 7 pm, the hour hand has moved 7 hours. Since it moves at a rate of 30 degrees per hour, the angle covered is 7 * 30 = 210 degrees.

Question 6

What is the angle between the minute hand and the hour hand when the time is 10:15 p.m.?

(a) 190

(b) 210

(c) 220

(d) 230

Answer 6: (b) 210

Explanation: To find the angle between the minute hand and the hour hand at 10:15 p.m., we can use the formula: (30*hour – (11/2) minutes)|. Substituting the values: |(3010 – (11/2)*15)| = |(300 – 82.5)| = 217.5 degrees, which is approximately 210 degrees.

Question 7

At what angle are the hour hand and the minute hand when it is 2:30 p.m.?

(a) 100

(b) 105

(c) 150

(d) 170

Answer 7: (b) 105

Explanation: At 2:30 p.m., the hour hand is on 2, and the minute hand is on 6. To find the angle between them, we can use the formula: |(30*hour – (11/2) minutes)|. Substituting the values: |(302 – (11/2)*30)| = |(60 – 165)| = 105 degrees

Question 8

How many times in 3 days are the hands of a clock in a straight line but in the same direction?

(a) 6

(b) 8

(c) 10

(d) 12

Answer 8: (a) 6

Explanation: In 3 days, the hour and minute hands of the clock will be in a straight line but moving in the same direction 6 times.

Question 9

If a clock starts at 5:00 p.m., then by how many degrees has the hour hand of the clock rotated at 11:00 p.m.?

(a) 210

(b) 180

(c) 90

(d) 360

Answer 9: (b) 180

Explanation: From 5:00 pm to 11:00 pm, the hour hand has moved 6 hours, and since it moves at a rate of 30 degrees per hour, it has rotated 6 * 30 = 180 degrees.

Question 10

The angle between the hour hand and minute hand at 7:20 p.m. is

(a) 120

(b) 180

(c) 210

(d) 90

Answer 10: (b) 180

Explanation: To find the angle between the hour hand and minute hand at 7:20 p.m., we can use the formula: |(30*hour – (11/2) minutes)|. Substituting the values: |(307 – (11/2)*20)| = |(210 – 110)| = 180 degrees.

For more questions on CLAT Quantitative Aptitude Section, click here!