Entrance Test Practice Questions

Question 1: If 3 painters can paint 3 walls in 3 hours, how long would it take 9 painters to paint 9 walls?

☐ A. 1 hour ☐ B. 3 hours ☐ C. 9 hours ☐ D. 27 hours

Correct Answer: B

Explanation: This is a work-rate problem. If 3 painters paint 3 walls in 3 hours, it implies that one painter paints one wall in 3 hours (since 3 painters working simultaneously paint 3 walls in that time). Therefore, each painter's individual rate is 1 wall per 3 hours. If you have 9 painters, and each painter still takes 3 hours to paint one wall, then 9 painters can paint 9 walls simultaneously in the same amount of time, which is 3 hours. The number of walls and painters scales proportionally, but the time per wall per painter remains constant.

Question 2: A shopkeeper sells an item for $450, making a profit of 25%. What was the original cost price of the item?

☐ A. $360 ☐ B. $375 ☐ C. $400 ☐ D. $425

Correct Answer: A

Explanation: Let the original cost price be C. The selling price (SP) is the cost price plus the profit. Profit is 25% of the cost price, which is 0.25C. So, SP = C + 0.25C = 1.25C. Given SP = $450. Therefore, 1.25C = 450. C = 450 / 1.25 C = 360. The original cost price was $360.

Question 3: If a cylindrical tank has a radius of 7 meters and a height of 10 meters, what is its volume? (Use π=722)

☐ A. 1540 m3 ☐ B. 440 m3 ☐ C. 700 m3 ☐ D. 2200 m3

Correct Answer: A

Explanation: The volume of a cylinder is given by the formula V=πr2h, where r is the radius and h is the height. Given r = 7 meters, h = 10 meters, and π=722. V=722×(7)2×10 V=722×49×10 V=22×7×10 V=154×10 V=1540 m3.

Question 4: The product of two numbers is 2160. If their Highest Common Factor (HCF) is 12, what is their Least Common Multiple (LCM)?

☐ A. 180 ☐ B. 240 ☐ C. 360 ☐ D. 480

Correct Answer: A

Explanation: For any two positive integers, the product of the numbers is equal to the product of their HCF and LCM. Product of numbers = HCF × LCM Given, Product of numbers = 2160 Given, HCF = 12 So, 2160 = 12 × LCM LCM = 2160 / 12 LCM = 180.

Question 5: A car travels at a speed of 60 km/h for 4 hours. If it needs to cover the same distance in 3 hours, what should be its speed?

☐ A. 70 km/h ☐ B. 75 km/h ☐ C. 80 km/h ☐ D. 90 km/h

Correct Answer: C

Explanation: First, calculate the total distance covered. Distance = Speed × Time Distance = 60 km/h×4 hours=240 km. Now, the car needs to cover the same distance (240 km) in 3 hours. New Speed = Distance / New Time New Speed = 240 km/3 hours=80 km/h.

Question 6: What is the next number in the sequence: 2, 5, 10, 17, 26, ___?

☐ A. 35 ☐ B. 37 ☐ C. 39 ☐ D. 41

Correct Answer: B

Explanation: Observe the differences between consecutive terms: 5 - 2 = 3 10 - 5 = 5 17 - 10 = 7 26 - 17 = 9 The differences are consecutive odd numbers (3, 5, 7, 9). The next difference should be 11. So, the next number in the sequence is 26 + 11 = 37. Alternatively, the sequence can be represented as n2+1: 12+1=2 22+1=5 32+1=10 42+1=17 52+1=26 So, the next term is 62+1=36+1=37.

Question 7: Five friends, A, B, C, D, and E, are sitting in a circle. A is to the immediate left of B. C is sitting between D and E. If E is to the immediate right of B, who is sitting to the immediate right of A?

☐ A. B ☐ B. C ☐ C. D ☐ D. E

Correct Answer: D

Explanation: Let's arrange them step-by-step in a circle:

1. "A is to the immediate left of B." (Imagine B is facing the center, A is to B's left) ... A B...
2. "E is to the immediate right of B." ... A B E...
3. "C is sitting between D and E." Since E is already placed, C must be next to E, and D next to C. ... A B E C D... Now, connecting the circle, D must be next to A. So the order is A, B, E, C, D (clockwise or counter-clockwise depending on perspective, but relative positions remain). If A is to the immediate left of B, then B is to the immediate

right of A. But this is a circle, so A's *other* immediate neighbor (to A's right) is D. Let's visualize: A - Left of B B - Right of A E - Right of B C - Between D and E So, we have: A -> B -> E. Since C is between D and E, and E is already placed, the sequence becomes: D -> C -> E. Combining: A -> B -> E -> C -> D -> A (completing the circle). Therefore, the person to the immediate right of A is D.

Re-evaluating the question: "Who is sitting to the immediate right of A?" Let's draw it for clarity (assuming clockwise is 'right'): Start with A to the immediate left of B: (A) (B) Then E is to the immediate right of B: (A) (B) (E) Then C is between D and E: (D) (C) (E) Combining: (D) (A) (B) (E) (C) In a circle, the person to the immediate right of A is D.

Let's re-verify the question's options and the initial interpretation. A is to the immediate left of B. (B, A) E is to the immediate right of B. (A, B, E) C is between D and E. (D, C, E) So, the sequence is (D, C, E, B, A). In a circle, the person to the immediate right of A is D.

The options given are A, B, C, D, E. My answer D is an option.

Question 8: Which word does not belong in the group: 'Hammer, Saw, Drill, Nail'?

☐ A. Hammer ☐ B. Saw ☐ C. Drill ☐ D. Nail

Correct Answer: D

Explanation: Hammer, Saw, and Drill are all tools used for construction or repair. A Nail, on the other hand, is a fastener or a material used by these tools, not a tool itself. Therefore, 'Nail' is the odd one out.

Question 9: Choose the word that best completes the analogy: 'Oven is to bake as Refrigerator is to ____'.

☐ A. Cook ☐ B. Freeze ☐ C. Heat ☐ D. Eat

Correct Answer: B

Explanation: The relationship between 'Oven' and 'bake' is that an oven is used for the action of baking. Similarly, a 'Refrigerator' is used for the action of freezing or keeping things cold. Among the given options, 'Freeze' best describes the primary function of a refrigerator in relation to food preservation.

Question 10: Choose the correct sentence:

☐ A. She go to the market every day. ☐ B. She goes to the market every day. ☐ C. She going to the market every day. ☐ D. She gone to the market every day.

Correct Answer: B

Explanation: This question tests subject-verb agreement in the simple present tense. For a third-person singular subject (She, He, It), the verb in the simple present tense takes an '-s' or '-es' ending. 'She go' is incorrect. 'She going' requires a helping verb (e.g., 'is going' for present continuous). 'She gone' requires a helping verb (e.g., 'has gone' for present perfect). 'She goes' correctly follows the rule of subject-verb agreement for 'she' in the simple present tense.

Question 11: Identify the synonym for the word 'Diligent':

☐ A. Lazy ☐ B. Careless ☐ C. Industrious ☐ D. Indifferent

Correct Answer: C

Explanation: 'Diligent' means having or showing care and conscientiousness in one's work or duties. 'Lazy' is an antonym. 'Careless' is an antonym. 'Industrious' means diligent and hard-working, making it the correct synonym. 'Indifferent' means having no particular interest or sympathy, which is unrelated.

Question 12: Choose the sentence that uses the correct tense:

☐ A. They had played soccer tomorrow. ☐ B. They will play soccer yesterday. ☐ C. They are playing soccer now. ☐ D. They played soccer next week.

Correct Answer: C

Explanation: This question assesses understanding of verb tenses and their appropriate usage with time indicators. A. "They had played soccer tomorrow" is incorrect. "Had played" is past perfect, but "tomorrow" indicates future. B. "They will play soccer yesterday" is incorrect. "Will play" is future, but "yesterday" indicates past. C. "They are playing soccer now" is correct. "Are playing" is present continuous, appropriately used with "now" to indicate an ongoing action. D. "They played soccer next week" is incorrect. "Played" is simple past, but "next week" indicates future.