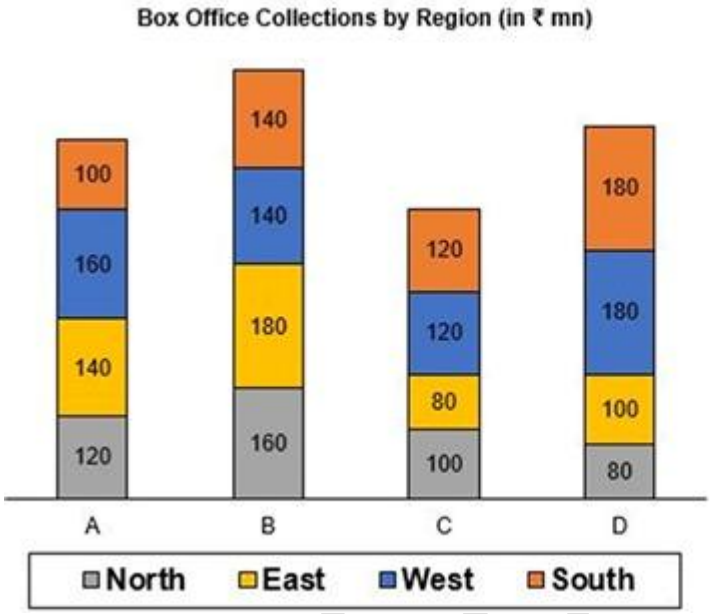
Mock Test 1

LOGICAL REASONING & DATA INTERPRETATION PRACTICE PAPER LRDI Set-1

Questions 1 to 5

Directions: Answer the questions on the basis of the information given below:

During a particular year, five movies – A through E – were released in the four regions of a country – North, South, East, and West. Each movie was ranked from 1 to 5 in each region, in the descending order of the box office collections of the movie in that region. In any region, no two movies had the same box office collections. The bar graph below provides the box office collections of four of the five movies – A, B, C, and D – in each of the four regions. The table adjacent to the bar graph provides the sum of the ranks obtained by these four movies in the four regions.



Movie	Sum of Ranks
A	13
B	10
C	18
D	10

Q1. Which of the following statements is definitely true?
(a) The box office collections of E across the four regions combined is greater than ₹540 mn.
(b) The box office collections of E across the four regions combined is less than ₹540 mn.
(c) The box office collections of E across the four regions combined is greater than ₹640 mn.
(d) The box office collections of E across the four regions combined is less than ₹640 mn.

Q2. In how many of the four regions was B's rank better, i.e., numerically lower, than that of E?

Q3. What is the sum of the ranks obtained by E across the four regions?

Q4. Which of the following can be the total box office collections of E in East and South combined?
(a) ₹320 mn
(b) ₹300 mn
(c) ₹260 mn
(d) ₹200 mn

Q5. Which of the following can be the box office collections of E in North?
(a) ₹170 mn

(b) ₹150 mn
(c) ₹135 mn
(d) ₹70 mn

Questions 6 to 10

Directions: Answer the questions on the basis of the information given below:

In a city, there are three types of city buses – Ordinary, Metro and Luxury. The price of the ticket for each bus depends on the distance for which a passenger travels. For travelling a distance which is at most 4 km, the price of the ticket for the three types of buses are ₹20, ₹30 and ₹60 respectively. For each additional km or part thereof, the price of the ticket for the three type of buses increases by ₹8, ₹10 and ₹20 respectively. Further, there is a monthly pass – enabling unlimited travel in a month – available for each of the three types of buses, priced at ₹1000, ₹2200 and ₹6300 respectively. Any pass is valid only in the type of bus for which it is meant. Any passenger will try to minimize the total amount that he/she spends in each month on bus travel, i.e., on tickets or bus pass, considering the distance of his/her travel during the month and the cost of the monthly pass.

Q6. Every day, Tina makes three trips – 3 km in a Luxury bus, 7 km in a Metro bus and 8 km in an Ordinary bus. What will be the total amount that Tina spends on travelling by bus in April 2020?
(a) ₹4600
(b) ₹5000
(c) ₹5160
(d) ₹5240

Q7. On each day of the month of June 2020, Tarun travelled *m* km from home to office by a Metro bus and *m* km from office to home in a Luxury bus. If Tarun purchased a monthly pass for Luxury bus but did not purchase a pass for Metro bus, how many integral values can *m* assume?
(a) 1
(b) 2
(c) 3
(d) 0

Q8. Mahesh always travels by Luxury bus. Every day, he travels 3 km from home to office, 2 km from office to gym and *x* km from gym to his home. If Mahesh bought a monthly pass in every month of the year 2019, which of the following best describes *x*?
(a) $x > 5$
(b) $x > 5.5$
(c) $x > 6$
(d) $x > 6.25$

Q9. Hiren, Lal and Krish travel exactly once every day by Ordinary bus, Metro bus and Luxury bus, respectively. Hiren, Lal and Krish did not buy a monthly pass for May 2019. If *h*, *l* and *k* represent the maximum distance that they could have travelled in a day, which of the following statements is true?
(a) $h < k < l$
(b) $h < l < k$
(c) $k < h < l$
(d) $l < h < k$

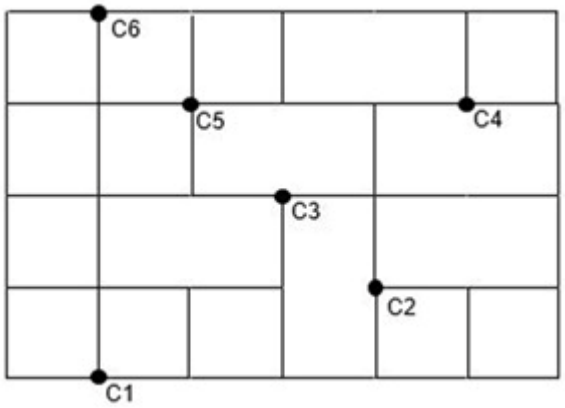
Q10. If Gaurav always travels by the same type of bus and he travels *n* km from home to office and *n* km from office to home every day, which of the following statements is definitely true?

I. If n < 4.93 and he always travels by Metro bus, he will not buy a monthly pass for February 2019.
II. If n < 4.26 and he always travels by Ordinary bus, he will not buy a monthly pass for May 2020.
III. If n < 6.43 and he always travels by Luxury bus, he will not buy a monthly pass for February 2020.
(a) 0
(b) 1
(c) 2
(d) 3

Questions 11 to 14

Directions: Answer the questions on the basis of the information given below:

The following diagram shows the roads connecting six cities, indicated in the diagram as C1 through C6:



The six cities, denoted in the diagram as C1 through C6, are Violetwick, Whitesilver, Shadehollow, Moormead, Southshore and Icefay, not necessarily in the same order. Any person travelling from one city to another does not pass through any other city. Further, while starting from a city, among the roads connected to that city, a person will travel only along the roads going North or South. However, while arriving at a city, he may arrive at the city along any of the roads connected to that city. In the information provided below, the number and the order of the turns taken (left or right) by a person to travel between a few pairs of cities are given. Further, before and after taking any turn, a person always travels for some distance.

- To reach Shadehollow from Moormead, a person took two right turns, a left turn and another right turn, in that order.
- To reach Violetwick from Whitesilver, a person took two right turns and a left turn, in that order.
- To reach Southshore from Violetwick, a person took three left turns and two right turns, in that order.

Q11. If a person starts from Shadehollow, took one left turn and reached another city, which of the following cannot be the city that he reached?
(a) Whitesilver
(b) Southshore
(c) Moormead
(d) More than one of the above

Q12. If a person wanted to go from Moormead to Shadehollow, what is the minimum number of turns that he must take?
(a) 0

(b) 1
(c) 2
(d) 3

Q13. If a person started from Southshore and took exactly one turn, how many of the other five cities can he reach?
(a) 1
(b) 2
(c) 3
(d) More than 3

Q14. What is the city represented by C5?
(a) Moormead
(b) Whitesilver
(c) Violetwick
(d) Southshore

Questions 15 to 18

Directions: Answer the questions on the basis of the information given below:

In a particular year, a group of 300 people visited some of the countries among China, Sri Lanka, Bhutan, Bangladesh and Pakistan. Further, each person visited at least one country. Any person who visited China also visited Bhutan, while any person who visited Pakistan also visited Bangladesh. Any person who visited Sri Lanka also visited China, while no person who visited Bangladesh visited China. It is also known that:

- The number of persons who visited Sri Lanka was twice the number of persons who visited only Bangladesh.
- The number of persons who visited only Bhutan was twenty less than the number of persons who visited exactly one country.
- The number of persons who visited Pakistan was three more than the number of persons who visited China.
- The number of persons who visited at least three countries was 145.

Q15. How many persons visited Bhutan and exactly one other country?

Q16. How many persons visited both Pakistan and China?

Q17. How many persons visited exactly one country?

Q18. Among the persons who visited Bhutan, how many persons visited Bangladesh?

Questions 19 to 22

Directions: Answer the questions on the basis of the information given below:

Sixty-eight chocolates are distributed among eight students – A, B, C, D, E, F, G and H – such that each student got at least five chocolates and no two students got the same number of chocolates. Also, the following information is known:

- C got as many chocolates more than D as F got less than G.

- E got exactly 11 chocolates.
- A got twice the number of chocolates that B got.
- C got more chocolates than each of F and H but less than G.

Q19. Who got the least number of chocolates?
(a) B
(b) D
(c) F
(d) H

Q20. The number of students who got more chocolates than F is:
(a) 5
(b) 4
(c) 6
(d) None of the above

Q21. The total number of chocolates with B, D, F and H put together is: _____

Q22. The total number of chocolates with B and G is equal to the total number of chocolates with:
(a) A and F
(b) H and C
(c) C and D
(d) F and H

End of Question Paper

Mock Test 1

Answer Key

1. **(d) The box office collections of E across the four regions combined is less than ₹640 mn**
2. **(c) In 2 of the four regions**
3. **(b) 10**
4. **(c) ₹260 mn**
5. **(b) ₹150 mn**
6. **(c) ₹5160**
7. **(b) 2**
8. **(d) x > 6.25**
9. **(b) h < l < k**
10. **(d) 3**
11. **(d) More than one of the above**
12. **(c) 2**
13. **(b) 2**
14. **(a) Moormead**
15. **60**
16. **0**
17. **100**
18. **0**
19. **(a) B**
20. **(c) 6**
21. **27**
22. **(b) H and C**