

Quaid-i-Azam University
Department of Computer Science

MS (Data Science / Information Science & Technology)
Sample Admission Test

The purpose of this sample test is to give applicants an idea of subject areas in which their knowledge will be evaluated. The number of questions may vary in the actual admission test.

Quantitative

Q. 1) A train running at the speed of 60 km/hr crosses a pole in 9 seconds. What is the length of the train in metres?

- A) 120 m B) 150 m C) 180 m D) 210 m E) None of these

Q. 2) A and B invest in a business in the ratio 3 : 2. If 5% of the total profit goes to charity and A's share is Rs. 855, the total profit in Rupees is:

- A) 1425 B) 1500 C) 1537.50 D) 1576 E) None of these

Analytical

Questions 3, and 4 are based upon the following scenario.

In the commonwealth games, the flags of six nations were flown on the masts in the following way. The flag of USA was to the left of Pakistani flag and to the right of French flag. The flag of Australia was on the right of Pakistani flag but was to the left of Japanese flag, which was to the left of Chinese flag. Now answer the following questions:

Q. 3) Which of the flag is to the extreme left?

- A) Pakistan B) France C) Japan D) USA E) None of these

Q. 4) Which of the flag is second from right?

- A) France B) Pakistan C) Japan D) Australia E) None of these

Logic

Q. 5)

Box	1	2	3	4	5	6
Content	2	4	6	8	10	12

1. Multiply contents of box no.1 with the contents of box. No 3 and add result to the contents of box no. 2.
2. Subtract contents of box no. 4 from the contents of box no. 2 and add result to the contents of box no. 5.
3. Divide the contents of box no. 5 with two and add the result to the contents of box. No 6.
4. Add one in the contents of box no. 6.
5. The contents of box. no 6 are:
A) 14 B) 18 C) 22 D) 23 E) None of these

Problem Solving and Programming

Q. 6) How would you measure exactly 6 liters of water when you have only two containers, a 4 liters bucket and a 9 liters bucket. Write an algorithm/pseudo code to solve the problem.

Q. 7) Write code in C++ / Java/Python to reverse the data stored in an array of size N (after execution, item stored at location 0 is swapped with the item stored at location N-1 and so on).

Databases

Q. 8) Give the structure Query Language syntax of the given queries. (1 page)

Artist (A_Id, A_Name, A_DoB, A_Label, A_City, A_Country)

Album (B_Id, B_Title, B_Release_D)

Song (S_Id, A_Id, S_Title, B_Id, S_Release_Date)

- i). Give the artists' detail who released a song in January 2022.
- ii). How many albums released in year 2021?

Data Structures and Algorithms

Q. 9) How an empty AVL tree would look like after inserting the following values in the given order: 67, 33, 55, 9, 81, 76, 24, 95