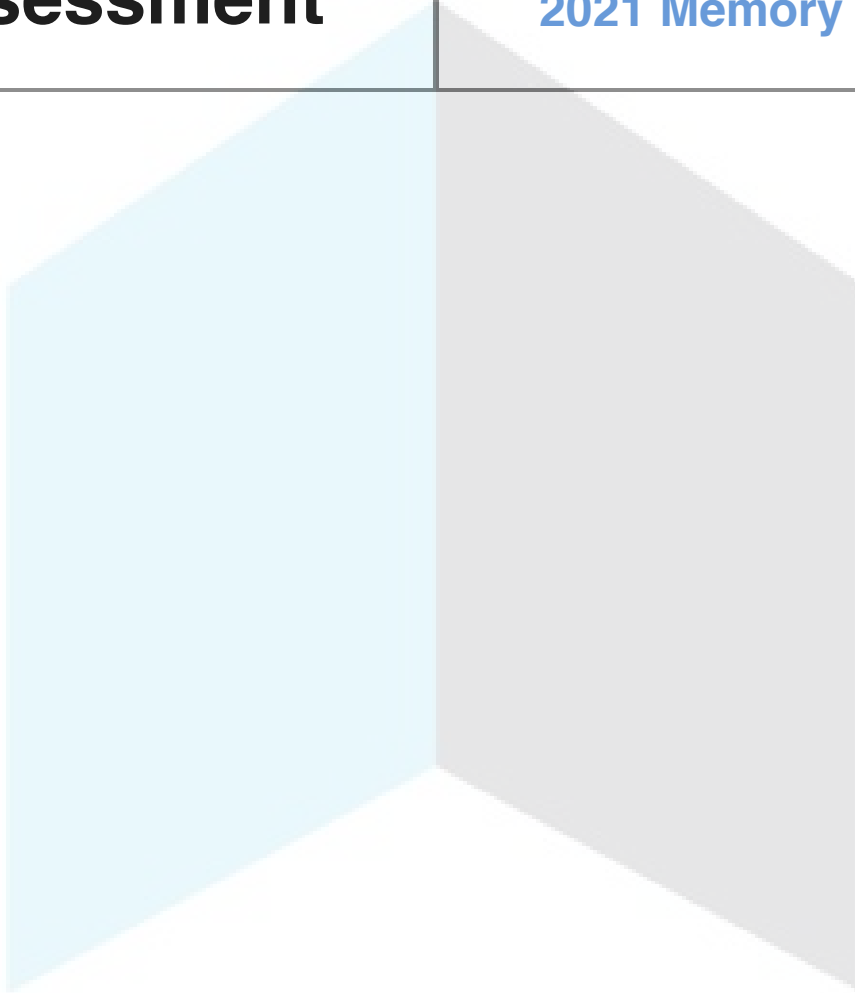


# **Infosys Technical Assessment**

## **Previous Year Paper (Mathematical Ability and Logical Reasoning) 2021 Memory Based**



## 10 Questions

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**Que. 1** At the end of a party, the eight people present all shake hands with each other once. How many handshakes will there be altogether?

1. 35
2. 28
3. 43
4. 30

**Testbook Solution** Correct Option - 2

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**Que. 2** Find the remainder when  $7^8 + 3$  is divided by 6.

1. 4
2. 6
3. 3
4. 2

**Testbook Solution** Correct Option - 1

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**Que. 3** If  $\alpha, \beta$  are the roots of  $x^2 - 2x + 2 = 0$  then the equation whose roots are  $\alpha^4, \beta^4$

1.  $x^2 - 8x + 16 = 0$
2.  $x^2 + 8x + 16 = 0$
3.  $x^2 - 8x - 16 = 0$
4.  $x^2 + 8x - 16 = 0$

**Testbook Solution** Correct Option - 2

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**Que. 4** The cost of digging a pit was 2,694. How much will it cost (approx) if the wages of men per day had been increased by  $\frac{1}{8}$  of the former wages and length of the working day increased by  $\frac{1}{20}$  of the former period ?

1. Rs. 2870
2. Rs. 2578
3. Rs. 2678
4. Rs. 2886

**Testbook Solution** Correct Option - 4

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**Que. 5** In how many ways can a team of 5 players be selected from 8 players so as not to include a particular player?

1. 42
2. 35
3. 21
4. 20

**Testbook Solution** Correct Option - 3

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**Que. 6** In a family of three children what is probability that the third child is a girl given that the other two are also girls?

1.  $\frac{1}{3}$
2.  $\frac{2}{3}$
3.  $\frac{1}{4}$
4.  $\frac{1}{6}$

**Testbook Solution** Correct Option - 3

**Que. 7** A train moving at 78 km/h crosses a tunnel in 45 seconds and a man moving at 6 km/h in the same direction in 15 seconds. What will be the length of the tunnel?

1. 550 m
2. 720 m
3. 675 m
4. 430 m

**Testbook Solution** Correct Option - 3

**Que. 8** A good costs Rs. 12,000. A customer can choose either of the pairs of successive discounts. Pair A consists of successive discounts of 20% and 30% and pair B consists of 40% and 10%. Customer X chose pair A and customer Y chose pair B. What is the difference in their payment for the good?

1. Rs. 120
2. Rs. 240
3. Rs. 180
4. Rs. 60

**Testbook Solution** Correct Option - 2

**Que. 9** The following question is accompanied by two statements (I) and (II). You have to determine which statement(s) is/are sufficient/necessary to answer the questions.

A person travels a distance of 1500m. What is the normal speed?

I. When he travels with a speed of 25 m/s he reaches 15 sec earlier

II. He requires 125 sec to reach if the speed is decreased by 8 m/s.

1. If the data given in the statement I alone is sufficient to answer the question whereas the data given in statement II alone are not sufficient to answer the question.
2. If the data given in the statement II alone is sufficient to answer the question whereas the data given in statement I alone are not sufficient to answer the question.
3. If the data given in either statement I or in statement II alone is sufficient to answer the question.
4. If the data given in both statement I and II is not sufficient to answer the question.

**Testbook Solution** Correct Option - 3

**Que. 10** There are 'n' members in a family and if their ages are arranged in descending order 24, 21, 18 .... And so on. It forms an A.P. The sum of their ages is 78. Find the number of people in the family.

1. 4
2. 13
3. Both 4 and 13

4. None of these

**Testbook Solution** Correct Option - 3

