

2. 9! / 2!

# LIC HFL MOCK TEST 3



- 3. 10!
- 4.  $9! / (2!)^4$

**Q 6.** If a number of two digits is formed with the digits 4, 6, 8, 7, 9 without repetition of digits, what is the probability that the number formed is 79?

- 1. 1/15
- 2. 1/20
- 3. 1/5
- 4. 1/7

**Q 7.** A man drives at 3/4th of his speed. He is 16 hours late in reaching his hometown due to bad weather and roads. The usual time taken by him to cover the distance between his starting point and his hometown is.

- 1. 24
- 2. 48
- 3. 20
- 4. 35

**Q 8.** The dimensions of the field are 30 m by 9 m. A pit 15 m long, 5 m wide, and 3 m deep is dug in one of the corners of the field and the earth removed has been evenly spread over the remaining area of the field. What will be the rise in the height of the field as a result of this operation?

- 1. 2
- 2. 1.5
- 3. 1.15
- 4. 2.5

**Directions (9-13):** Study the following information and answer the questions.

8 people A, B, C, D, E, F, G and H were born in 3 different months (of the same year) but not necessarily in the same order, namely March, June and December. Such that not less than two people and not more than 3 people were born in a month, each of them likes a different fruit namely Grapes, Papaya, Banana, Pomegranate, Mango, Orange, Strawberry and apple not necessarily in the same order.

Only B and H were born in March, C like Apple and was born in the same month as A. C was not born in December. The one who likes Mango was born in June. E does not like Mango. F was not born in the same month as H. G does not like Mango. The one who likes Strawberry and the one who likes Banana were born in the same month. The one who likes Strawberry was not born in the same month as H. F does not like Strawberry. The one who likes Grapes was born in the same month as A. B does not like Papaya.



Q 9.	. As per the giv	en arrangement	which of the	e following	combinations	represents or	ly the people	∍ who
were	e born in Decei	mber?						

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- 2. F, G, D
- 3. G, F
- 4. A, E

**Q 10.** As per the given arrangement, which of the following person represent the one who was born in the same month as the one likes Orange?

- 1. F
- 2. A
- 3. H
- 4. E

Q 11. Which of the following fruits does E like, as per the given arrangement?

- 1. Orange
- 2. Papaya
- 3. Grapes
- 4. Banana

**Q 12.** Which of the following combination is correct, as per the given arrangement.

- 1. June Orange
- 2. June Banana
- 3. December Banana
- 4. March Grapes

Q 13. Who amongst the following likes Papaya as per the given arrangement?

- 1. A
- 2. G
- 3. F
- 4. H



**Q 14.** Boris left for his office in the car. He drove 16 km towards the North and then 11 Km towards the West. He then turned to the South and covered 7 Km. Further, he turned towards the East and moved 9 Km. Finally, he turned right and drove 11 Km. How far and in which direction is he from the starting point.

- 1. 2 KM East
- 2. 4 KM South
- 3. 2 KM West
- 4. 3 KM North

**Directions (15 - 17):** Unscramble the letters in the words given in these questions and find the odd one out.

#### Q 15.

- 1. UDOJ
- 2. DTAENKWOO
- 3. RNELSGTIW
- 4. LEPES

#### Q 16.

- 1. GTIRE
- 2. BNIOS
- 3. UBLL
- 4. ERDE

# Q 17.

- 1. ANRMAEI
- 2. ARUSIS
- 3. CCPAIFI
- 4. EFNRCA

**Directions (18 - 22):** Rearrange the given 5 sentences in a proper sequence so as to form a meaningful paragraph.

1. Incumbents reported profits seem to rise persistently- often with the help of extremely efficient balance-sheet and finance management but there is scarce evidence of rising investments or wages.



- 2. Generally speaking, the reason that we have so many "issues" is that the international capitalist model has stopped functioning as it should, particularly in the years since the 2008 financial crisis.
- 3. This has become increasingly apparent to many Western Voters, even as experts have struggled to understand the precise nature of economic and political shifts underway.
- 4. According to the economic textbooks that I grew up within the 1970s successful businesses within a market-based system should deliver profits to their equity owners, which in turn should lead to a stronger investment and rising wages.
- 5. At the same time, the potential for profits should attract new market entrants, which in turn should erode the incumbent's profitability, fuel consumption, and spur innovation. This pattern no longer hold

no longer hold.	
Q 18. Which is the last sentence in the passage?	
1. 1	

- **Q 19.** Which is the 2nd sentence in the passage?
  - 1. 2

2. 4 3. 2 4. 5

- 2. 3
- 3. 5
- 4. 1
- Q 20. Which is the 3rd sentence in the passage?
  - 1. 4
  - 2. 2
  - 3. 3
  - 4. 1
- **Q 21.** Which is the 4th sentence in the passage?
  - 1. 1
  - 2. 3
  - 3. 4
  - 4. 5
- Q 22. Which is the 1st sentence in the passage?
  - 1. 2
  - 2. 5
  - 3. 4
  - 4. 3



**Directions (23 - 25):** Fill in the blanks with the appropriate word.

French President Emmanuel Macron's recent ---- (23) ---- to Russia have been described as highly aspirational and deeply pragmatic. Whatever the case, much diplomatic and political ---- (24)----- will be needed to restore Russia to a position of good standing vis-a-vis the West. In this Big Picture, an expert from European Council on Foreign Relations explains the French Governments thinking and notes that success will depend on its ability to get all Europeans on board. There is a little reason not to give Macrons initiative a shot, given that the current Western strategy of ----containment---- has clearly failed.

#### Q 23.

- 1. Overtures
- 2. Arguments
- 3. Acrimony
- 4. Audacious

#### Q 24.

- 1. Agreement
- 2. Negotiations
- 3. Correspondence
- 4. Wrangling

## Q 25.

- 1. Containment
- 2. Pragmatic
- 3. Restore
- 4. Renewed



## **Answer Keys**

<b>Q 1.</b> 3	<b>Q 2.</b> 1	<b>Q</b> 3. 4	<b>Q 4.</b> 4	<b>Q</b> 5. 4
<b>Q 6.</b> 2	<b>Q 7.</b> 2	<b>Q 8.</b> 3	<b>Q 9.</b> 3	<b>Q 10.</b> 3
<b>Q 11.</b> 3	<b>Q 12.</b> 3	<b>Q 13.</b> 4	<b>Q 14.</b> 3	<b>Q 15.</b> 4
<b>Q 16.</b> 1	<b>Q 17.</b> 3	<b>Q 18.</b> 1	<b>Q 19.</b> 2	<b>Q 20.</b> 1
Q 21. 4	<b>Q 22.</b> 1	<b>Q 23</b> . 1	<b>Q 24.</b> 4	<b>Q 25.</b> 1

#### **Solution 1:**

First 10 prime numbers are

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31

Average = (2+3+5+7+11+13+19+23+29+31) / 10

= 16

#### Solution 2:

The income of the family for 9 months = Expenditure for 9 months + Savings for 9 months.

The average expenditure for 1st 3 months = Rs 3250

Hence total expenditure for 1st 3 months =  $3250 \times 3 = \text{Rs} 9750$ 

The average expenditure of next 3 months = Rs 1175

Hence the total expenditure for next 3 months =  $1175 \times 3 = \text{Rs } 3525$ 

The average expenditure of last 3 months = Rs 2750

Hence the total expenditure for the last 3 months =  $2750 \times 3 = Rs 8250$ 

Total expenditure for 9 months = 9750 + 3525 + 8250

= Rs 21,525/-



Savings per month = Rs 250/-

Total savings for 9 months =  $250 \times 9 = 2250$ 

Hence income = 21525 + 2250 = Rs 23,775/-

#### **Solution 3:**

Percentage of milk in the quantity of 200 litres of mixture = 25%

Hence the quantity of milk = 50 Litres.

Quantity of water = 150 litres

When water is added, the percentage of milk is 20%, but the quantity remains the same at 50 litres.

When the percentage of milk is 20%, the percentage of water is 80%

Let the quantity of water added = x litres.

$$50 / (150 + x) = 20 / 80$$

$$50 \times 80 = (150 + x) \times 20$$

$$4000 = 3000 + 20x$$

$$20x = 1000$$

$$X = 50$$

50 litres should be added to the mixture.

#### Solution 4:

Area of base required = Number of people  $\times$  Space required by each person.

$$= 20 \times 10 = 200 \text{ m}^2$$

The volume of tent required = Number of person  $\times$  Amount of air to breathe.

$$= 20 \times 30 = 600 \text{ m}^3$$

Let radius = r, height = h, slant height = I

$$\pi \times r^2 = 200$$

Radius r =  $\sqrt{(200 / \pi)}$ 

The volume of cone =  $\frac{1}{3} \times \pi \times r^2 \times h$ 

 $600 = \frac{1}{3} \times \pi \times (200 / \pi) \times h$ 

Height h = 9 m

## Solution 5:

There are 10 letters in the word, hence the arrangement would have been 10!

But the last letter has to be occupied by G, which is a fixed position.

Hence there are remaining 9 letters which are to be filled in 9! Ways.

But there are some letter which are repeated.

A - Repeated twice

M - Repeated twice

N - Repeated twice

E - Repeated twice.

Hence the denominator will be given by

 $2! \times 2! \times 2! \times 2!$ 

Hence the final answer is

 $= 9! / (2! \times 2! \times 2! \times 2!)$ 

 $= 9! / (2!)^4$ 

## **Solution 6:**

Number of 2 digit numbers that can be formed out of 5 digits

 $= {}^{5}P_{2}$ 

 $=5\times4$ 

= 20



The logic is that the 1st position can be filled in 5 ways and 2nd position can be filled by the remaining 4 digits.

Hence probability is given by

- = (Number of possibilities of forming 79) / Total number of possibilities of forming 2 digit number
- = 1/20

#### Solution 7:

When the speed goes down the time taken to cover the distance goes up as both are inversely proportional.

When the speed reduces by ¾ of his original speed the time required to cover the same distance goes up by 4/3, as both are inversely proportional.

Extra time required is 16 hours.

Now this extra time required is equal to 1/3rd of the normal time.

$$1/3(x) = 16$$

X = 48 hours.

#### Solution 8:

The volume of the mud dug out

$$= 15 \times 5 \times 3$$

$$= 225 \text{ m}^3$$

Let the remaining ground rise be given by 'h' metre.

$$[(30 \times 9) - (15 \times 5)] \times h = 225$$

$$(270 - 75) \times h = 225$$

$$195 h = 225$$

Rise in height h = 1.15 m



#### Solution 9:

Person	Month	Fruit
А	June	Mango
В	March	Orange
С	June	Apple
D	December	Pomegranate
Е	June	Grapes
F	December	Banana
G	December	Strawberry
Н	March	Papaya

As per the table, we can find that F, G, D is the answer.

# Solution 10:

From the above table, we can find that H is the answer.

## Solution 11:

From the above table, we can find that E likes Grapes.

#### Solution 12:

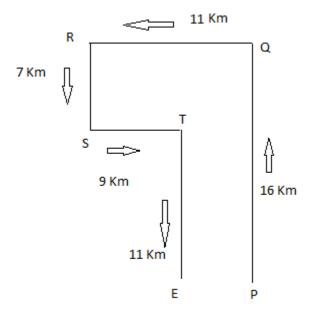
As per the table, we can find that December- Banana is the right option.

# Solution 13:

As per the table, we can find that H is the answer.



## Solution 14:



From the above figure, we can notice that he is 2 Km West from the starting point.

## Solution 15:

Option 1 is Judo, Option 2 is Taekwondo, Option 3 is wrestling, and Option 4 is sleep. The first 3 options come under the sports category.

## **Solution 16:**

Option 1 is Tiger, Option 2 is Bison, Option 3 is Bull, and Option 4 is Deer. Only 1st option refers to Carnivores animal.

## Solution 17:

Option 1 is Armenia, Option 2 is Russia, Option 3 is Pacific, and Option 4 is France.

Hence apart from the Pacific, all are countries.