**PayPal Maths Test**

To move to the next round, one had to score at least 15/24.

Some of these questions were diagram based, but the visuals/diagrams couldn’t be captured.

1. Amy and Bill are Playing Basketball. Amy Scores a basket with probability 2/3, whereas Bill Scores with probability 1/3. Every shot is independent of the previous one.  
  
Before each shot Alice throws a dice. The outcome determines who will take the next shot (Amy or Bill). The first person scoring 3 times wins.  
  
Which of the following combinations gives equal probability of winning to Amy and Bill?

Alice 1, 2, 3 and Bill 4, 5, 6

Alice 4, 6 and Bill 1, 2, 3, 5

Alice 3, 4, 5, 6 and Bill 1, 2

Alice 5 and Bill 1, 2, 3, 4, 6

None of the above

**1/1 point**

**Question Title**

2. The following data are from The Commissioner’s Standard Ordinary Table of Mortality:  
  
Age     Number Surviving  
0         10,000,000  
20         9,845,145  
40         8,300,457  
70         4,689,132  
  
What is the probability that a 20–year–old will survive to be 70?

0.407

0.476

0.559

0.835

0.985

**0/1 point**

**Question Title**

3. A teacher surveys her class of 60 students, she asks them their favourite subject and finds that 15 said English, 35 said Maths and the other 10 said Irish. Every student chose only one subject. What is the probability that a randomly selected students favourite subject was English or Maths?

1/2

2/3

3/4

5/6

**1/1 point**

**Question Title**

4. What is the probability of getting a sum of 15 when throwing two fair [12 sided] Dice?

12%

10%

5%

3%

None of the above

**0/1 point**

**Question Title**

5. What is the difference between the mean of the numbers starting from 150 to 230 and 300 to 500 in both, starting and ending numbers are inclusive?

180

190

210

220

250

**1/1 point**

**Question Title**

6. The sequence x1, x2, x3,…, xn-1, xn,… is such that [ xn = ( xn-1 + xn-2 ) / 2 ] for all n >= 3. If x3 = 6 and x5 = 24, what is the value of x6?

27

29

30

33

34

**0/1 point**

**Question Title**

7. Among 5,000 investors, 28% invest in stock A, 16% invest in stock B, and 10% invest in both stocks. What is the probability of an investor investing in stock B but not in stock A?

3/50

4/25

3/25

1/10

4/50

**0/1 point**

**Question Title**

8. A is an integer which is 50% of 50% of another integer B, and A% of B equals 400. What is the value of B?

800

200

100

400

80

9. For the year in which earnings from Software operations first exceeded more than €600 million, total revenues were approximately

$1 Billion

$4.25 Billion

$6.1 Billion

$800 Million

$67.5 Billion

**1/1 point**

**Question Title**

10. In 2016, total earnings for company Z were approximately what percent of total revenues?

20%

5%

25%

10%

15%

**1/1 point**

**Question Title**

11. In 2019, earnings from Computer’s hardware operations accounted for approximately how many millions of dollars?

75 million

225 million

300 million

50 million

125 million

**1/1 point**

**Question Title**

12. What is the net profit as percentage of ASL Tiles sales in 2019?

4.85%

5.46%

7.2%

6.23%

**0/1 point**

**Question Title**

13. By how much percentage has the net profit dropped in 2019?

7%

9.5%

8%

Cannot be determined

**1/1 point**

**Question Title**

14. If ASL tiles sold 20,000 units in both 2017 and 2019, by what percentage has the price per unit changed?

25.4%

29.7%

65%

Cannot be determined

**0/1 point**

**Question Title**

15. In which year the expense of ASL tiles is the highest, is

2016

2017

2019

2020

Cannot be determined

**0/1 point**

**Question Title**

16. What is the number of BMW cars sold in 2016(in ‘000s)?

750

500

1500

Can't Say

**1/1 point**

**Question Title**

17. Which of the following statements is false?

The number of BMW cars sold registered a decrease from 2016 to 2017

The number of BMW cars sold registered an increase from 2017 to 2018

The number of Renault cards sold registered an increase from 2018 to 2019

Both 1 and 2

**0/1 point**

**Question Title**

18. Which of the following statements is/are true?

The percentage decrease in the number of cars sold by BMW from 2016 to 2020 is 75%

The number of cars sold by Renault in 2019 and 2020 is the same

The percentage increase in the number of cars produced by Tesla in 2018, when compared to that of 2017 is more than 100%

None of these

**0/1 point**

**Question Title**

19. The Number of Renault cars sold was minimum in the year

2017

2018

2019

2020

**0/1 point**

**Question Title**

20. The total number of cars sold was maximum in the year

2017

2018

2019

2020

**1/1 point**

**Question Title**

21. In which year was the value of exports per kilogram lowest?

2010

2011

2012

2013

**1/1 point**

**Question Title**

22. In the period 2010 to 2015, what was the mean price per kilogram of food exported?

€ 1.70

€ 8.90

€ 12.80

€ 17.75

**0/1 point**

**Question Title**

23. In how many years has the price per kilogram of food exported decreased when compared with the previous year?

Twice

Three Times

Four Times

One Time

**1/1 point**

**Question Title**

24. Assuming the price per kilogram of food increased from 2015 to 2016 by 10.25%, what was the percentage increase in quantity of food exported in this same period?

10.25%

5.5%

15.75%

Can't be determined

**0/1 point**