**General Aptitude Test**

**Candidate Name: Mobile No:**

**Branch: Year of Graduation:**

6. Find the missing number:

15, ?, 30, 45

1] 25 2] 20 3] 17 4] 28

7. William is 12 years older than Michael, and Michael is 2 years younger than Anna, who is 12 years old. How old is William?

1] 18 years old 2] 22 years old 3] 16 years old 4] 20 years old

8. Find the missing number:

4,?,20,10,100,50,500

1] 40 2] 5 3] 2 4] 30

11) Read the following statements carefully:

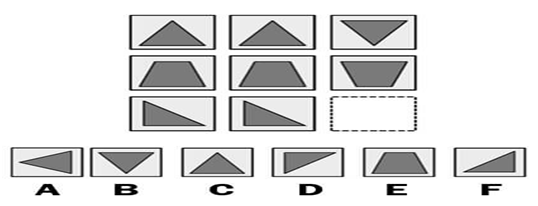
* Tim lives in a big apartment
* Abby lives in a small apartment
* There are no big apartments in Tinyville
* Small apartments have one bedroom

Which statement must be true?

A. Tim lives in Tinyville. B. Abby lives in Tinyville.

C. Abby's apartment has one bedroom. D. Big apartments have one bedroom.

13)In questions of this type, the relationship between certain features of the figures in the matrix determines the frequency and/or order of their appearance. Let’s look at an example:

**

*4. Crusoe hatched from a mysterious egg discovered by Angus was growing at a fast pace that Angus had to move it from home to the lake. Given the weights of Crusoe in its first weeks of birth as 5, 15, 30, 135, 405, 1215, 3645. Find the odd weight out.*

*a) 3645*

*b) 135*

*c) 15*

*d) 30*

*Answer: d) 30*

7. Consider the following logical inferences.

I1: If it rains then the cricket match will not be played.

The cricket match was played.

**Inference**: There was no rain.

I2: If it rains then the cricket match will not be played.

It did not rain.

**Inference**: The cricket match was played.

Which of the following is **TRUE**?

**(A)** Both I1 and I2 are correct inferences

**(B)** I1 is correct but I2 is not a correct inference

**(C)** I1 is not correct but I2 is a correct inference

**(D)** Both I1 and I2 are not correct inferences

**Answer:** **(B)**

**Explanation:** The cricket match may not be played even if doesn’t rain.

**2 Marks**

12) A bookstore sells books at a profit of at least 15% of the final selling price. The store buys a certain book at a cost of $17. If the store gives students a 20% discount, what should the selling price of the book before the discount be?

A) $20 B) $21 C) $23 D) $24 E) $25

15) What is the next number in this series?

1, 2, 6, 42, 1806, ?

3263442

23. 2 + 22 + 23 + … + 28 = ?

1. 510 B. 250 C. 1040 D. 680

*5. A pole of height 36m is on one edge of a road broke at a certain height. It fell in such a way that the top of the pole touches the other edge of the road. If the breadth of the road is 12m, then what is the height at which the pole broke?*

16

16) A can do piece of work in 30 days while B alone can do it in 40 days. In how many days can A and B working together do it?

1. 113/7 B. 120/7 C. 127/7 D. 134/7

18. Peter and Paul are roommates.

Each of them pays the rent, according to their room’s size.

Peter’s room is twice as big as Paul’s.

How much rent does Peter pay, if the total rent is £1200?

A. 600 B. 800 C. 400 D. 500

19. An organic greenhouse grows Roses and Lilies in an 11:10 ratio in favour of the Roses. On Valentine's Day, the owner of the greenhouse was overflowed with orders and sold out his entire stock of flowers. If the total amount of Lilies was 2,000 how many more Roses than Lilies were sold?

A. 2,200 B. 2,100 C. 200 D. 180

|  |
| --- |
|  |

21. When an amount was distributed among 14 boys, each of them got rs 80 more than the amount received by each boy when the same amount is distributed equally among 18 boys. What was the amount?

1. 502
2. 5030
3. 5040
4. 5050

22. A train 150 m long is running with a speed of 68 kmph. In what time will it pass a man who is running at 8 kmph in the same direction in which the train is going?

1. 7 sec B. 10 sec C. 8 sec D. 9 sec

24. The length of a rectangle is twice its breadth. If its length is decreased by 5 cm and breadth is increased by 5 cm, the area of the rectangle is increased by 75 sq. cm. Find the length of the rectangle.

1. 20 cm B. 21 cm C. 22 cm D. 25 cm

6. A tourist covers half of his journey by train at 60 km/h, half of the remainder by bus at 30 km/h and the rest by cycle at 10 km/h. The average speed of the tourist in km/h during his entire journey is

**(A)** 36

**(B)** 30

**(C)** 24

**(D)** 18

**Answer:** **(C)**

**Explanation:** Let total distance be D

Total Time = D(1/2\*60 + 1/4\*30 + 1/4\*10) = D/24

Average Speed = Total distance / Total time = 24

8. Given the sequence of terms, AD CG FK JP, the next term is

**(A)** OV

**(B)** OW

**(C)** PV

**(D)** PW

**Answer:** **(A)**

**Explanation:** A—-2——-D

1

C—-3——-G

2

F—-4——-K

3

J—-5——-P

4

O—-6——-V

Hence, the next term will be OV .

1. Eight people are planning to share equally the cost of a rental car. If one person withdraws from the arrangement and the others share equally the entire cost of the car, then the share of each of the remaining persons increased by

1. One-ninth      2. One-eighth   3.One-seventh 4.Seven-eighths

Explanation:

When there are 8 people, the share of each person is 1/8 => (Original Share)

When there are 7 people, the share of each person is 1/7

Increase in the share of each person is 1/7 – 1/8 = 1 / 56

1 / 56 ==> Which is 1/7 of 1/8 ==> 1/7 of the original share of each person.

**3 Marks**

14) In the middle of a round pool lies a beautiful water-lily. The water-lily doubles in size every day. After exactly 20 days, the lily will cover the complete pool.

After how many days will the water lily cover half of the pool?

19 days

2. A political party orders an arch for the entrance to the ground in which the annual convention is being held. The profile of the arch follows the equation *y = 2x – 0.1x2*where y is the height of the arch in meters. The maximum possible height of the arch is

**(A)** 8 meters

**(B)** 10 meters

**(C)** 12 meters

**(D)** 14 meters

**Answer:** **(B)**

**Explanation:** *y = 2x – 0.1x2*

*dy/dx = 2 – 0.2x*

*So the value maximizes at 2 – 0.2x = 0*

*=> x = 10*

*=> y = 20 – 10 = 10 meters*

3 mark

9. We are given 100 pieces of a puzzle. If fixing two components together is counted as 1 move ( a component can be one piece or an already fixed set of pieces), how many moves do we need to fix the entire puzzle.

Ans - 99

Explanation - Fixing 2 components together = 1 move

98 components are left ,to again fix one of these to the other two = 1 move

97 comp left,so 97 more moves

Hence total number of moves required = 1 + 1 + 97 = 99.

*3 mark -*

*3. An automobile plant contracted to buy shock absorbers from two suppliers X and Y. X supplies 60% and Y supplies 40% of the shock absorbers. All shock absorbers are subjected to a quality test. The ones that pass the quality test are considered reliable. Of X’s shock absorbers, 96% are reliable. Of Y’s shock absorbers, 72% are reliable.*

*The probability that a randomly chosen shock absorber, which is found to be reliable, is made by Y is*

*(A) 0.288*

*(B) 0.334*

*(C) 0.667*

*(D) 0.720*

*Answer: (B)*

*Explanation:*

*Probability that the absorber is reliable = 0.96\*0.6 + 0.72\*0.4 = 0.576 + 0.288*

*Probability that  the absorber is from y and reliable =*

*(Probability that is made by Y)  X (Probability that it is reliable)*

*= 0.4 \* 0.72 = 0.288*

*The probability that randomly picked reliable absorber is from y =*

*(Probability that  the absorber is from y and reliable) / (>Probability that the absorber is reliable )*

*= (0.288)/ (0.576 + 0.288)*

*=  0.334*