Deloitte Sample Papers

1.   A train 110 m long is running with a speed of 60 km/hr. In what time will it pass a man who is running at 6 km/hr. in the direction opposite to that in which the train is going?

A.   5 secs

B.   6 secs

C.   7 secs

D.   10 secs

Explanation:

Speed of train relative to man = 60 + 6 = 66 km/hr.

=> 66 * 5/18 = 55/3 m/sec.

Time taken to pass the men = 110 * 3/55 = 6 sec.

2.   If the sum of the two numbers is 22 and the sum of their squares is 404, then the product of the numbers is?

A.   40

B.   44

C.   80

D.   88

Explanation:

Let the numbers be x and y.

Then, (x + y) = 22 and $x^2 + y^2 = 404$

Now,

=> 2xy = (x + y) ^2 - (x^2 + y^2)

=> 2xy= 22^2 - 404 = 484 - 404 = 80.

=> xy = 40

3.   Three pipes A, B and C can fill a tank from empty to full in 30 minutes, 20 minutes and 10 minutes respectively. When the tank is empty, all the three pipes are opened. A, B and C discharge chemical Expiations P, Q and R respectively. What is the proportion of Expiation R in the liquid in the tank after 3 minutes?

A.   5/11

B.   6/11

C.   7/11

D.   8/11

Explanation:

Part filled by (A + B + C) in 3 minutes = 3(1/30 + 1/20 + 1/10) = 11/20.

Part filled by C in 3 minutes = 3/10

Hence, the Required ratio = 3/10 * 20/11 = 6/11.

4.   The principal that amounts to Rs. 4913 in 3 years at 6 1/4 % per annum C.I. compounded annually, is?

A.   Rs. 3096

B.   Rs. 4076

C.   Rs. 4085

D.   Rs. 4096

Explanation:

According to the formula,

Principal = [4913 / (1 + 25/ (4 * 100))3].

=> 4913 * 16/17 * 16/17 * 16/17 = Rs. 4096.

5.   A completes a work in 2 days, B in 4 days, C in 9 and D in 18 days. They form group of two such that difference is maximum between them to complete the work. What is difference in the number of days they complete that work?

A.   14/3

B.   8/3

C.   5/3

D.   None of these

Explanation:

If C and D form a pair and A and B form a pair the difference is maximum.

Now C and D together can complete the work = 9×189+189×189+18 = 6 days.

A and B together can complete the work = 2×42 + 42×42 + 4 = 4/3 days.

Difference = 6 - 4/3 = 14/3 days.

6.   How many 4 digit numbers contain number 2?

A.   3170

B.   3172

C.   3174

D.   3168

Explanation:

Total number of 4 digit numbers are 9000 (between 1000 and 9999).

We find the numbers without any two in them. So total numbers are 8 x 9 x 9 x 9 = 5832

So, numbers with number two in them = 9000 - 5832 = 3168

7.   How many kgs of wheat costing Rs.24/- per kg must be mixed with 30 kgs of wheat costing Rs.18.40/- per kg so that 15% profit can be obtained by selling the mixture at Rs.23/- per kg?

A.   20

B.   15

C.   10

D.   12

Explanation:

S.P. of 1 kg mixture = Rs.23. Gain = 15%.

CP of 1 kg mixture = Rs. [(100/115) x 23] = Rs.20

Let the quantity of wheat costing Rs.24 is x kgs.

Using weighted average rule = (x×24+30×18.4)/ (x+30) =20

On Solving, we get x = 12.

8.   Find the next term of the series: -

7,14,55, 110,?

A.   125

B.   120
C.   115
D.   121
Explanation:
The numbers in the series are as follows: -
7 + 7 = 14, and reverse of 14 is 41.
Now, 41+14=55.
Similarly,
Reverse of 55 is 55.
Thus, 55 +55=110.
Now, reverse of 110 is 011 so the next term is 110+011=121.

9.   In a cycle race there are 5 persons named as J,K,L,M,N participated for 5 positions. How many number of ways can M finishes always before N?
A.   20
B.   36
C.   55
D.   60
Explanation:
Total number of ways in which 5 persons can finish is 5! = 120 (there are no ties)
Now, in half of these ways M can finish before N.

10.   A sells a bicycle to B at a profit of 20%. B sells it to C at a profit of 25%. If C pays Rs. 225 for it, the cost price of the bicycle for A is:
A.   Rs. 110
B.   Rs. 120
C.   Rs. 125
D.   Rs. 150
Explanation:
According to the question, 125% of 120% of A = 225.
=> 125/100 * 120/100 * A = 225
=> A = 225 * 2/3 = 150.

Deloitte Logical Reasoning Test

11.   Syllogism: -
Statements: Some mangoes are yellow.
Some tixo are mangoes.
Conclusions:
(1) Some mangoes are green.
(2) Tixo is a yellow.
A.   Only (1) conclusion follows

B.	Only (2) conclusion follows
C.	Either (1) or (2) follows
D.	Neither (1) nor (2) follows
E.	Both (1) and (2) follow
Answer: D.

12.	Syllogism: -
Statements: Some blue are black. Some black are grey.
All grey are red. All red are pink.
Conclusions:
(I) Some red are black.
(II) Some pink are black.
(III) Some pink are grey.
(IV) Some red are blue.
A.	Only I & II follow
B.	Only II & III follow
C.	Only I, II and III follow
D.	None of these
Answer: C.

13.	Blood Relation:
Pointing to a photograph, a lady tells Pramod, "I am the only daughter of this lady and her son is your maternal uncle." How is the speaker related to Pramod's father?
A.	Sister-in-law
B.	Wife C. Either a or b
C.	Neither a nor b
Answer: B.

14.	Directions & Distances: -
After walking 6 km, I turned to the right and then walked 2 km. After then I turned to the left and walked 10 km. In the end, I was moving towards the North. From which direction did I start my journey?
A.	North
B.	South
C.	East
D.	West
Answer: B.

15.	Directions & Distances: -
A child went 90 m in the East to look for his father, then he turned right and went 20 m. After this he turned right and after going 30 m he reached to his uncle's house. His father was not there. From there he went 100 m to his north and met his father. How far did he meet his father from the starting point?
A.	80 m
B.	100 m

C.   140 m
D.   260 m
Answer: B.

16.   Ordering & Ranking: -
Manisha ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?
A.   40
B.   44
C.   50
D.   55
E.   58
Explanation:
Number of boys who passed = (15 + 1 + 28) = 44.
.'. Total number of boys in the class = 44 + 6 + 5 = 55.

17.   Ordering & Ranking: -
If the numbers from 5 to 85 which are exactly divisible by 5 are arranged in descending order, which would come at the eleventh place from the bottom?
A.   35
B.   45
C.   50
D.   60
E.   None of these
Explanation:
The required numbers in descending order are:
85, 80, 75, 70, 65, 60, 55, 50, 45, 40, 35, 30, 25, 20, 15, 10, 5.
The eleventh number from the bottom is 55.

18.   Coding-Decoding:
In a code, CORNER is written as GSVRIV. How can CENTRAL be written in that code?
A.   DFOUSBM
B.   GIRXVEP
C.   GNFJKER
D.   GJRYVEP
E.   None of these
Explanation:
Each letter of the word is moved four steps forward to obtain the code.

19.   Data Sufficiency:
Question: Madan is elder than Kamal and Sharad is younger than Arvind. Who among them is the youngest?
Statements:
(I) Sharad is younger than Madan.

(II) Arvind is younger than Kamal.

A.   I alone is sufficient while II alone is not sufficient
B.   II alone is sufficient while I alone is not sufficient
C.   Either I or II is sufficient
D.   Neither I nor II is sufficient
E.   Both I and II are sufficient

Explanation:

As given, we have: M > K, A > S.

From II, K > A. Thus, we have: M > K > A > S.

So, Sharad is the youngest. From I, M > S. Thus, we have: M>K>A>S or M>A>K>S or M>A>S>K.

20.   Coding-Decoding:

If in a certain code, TWENTY is written as 863985 and ELEVEN is written as 323039, how is TWELVE written in that code?

A.   863203
B.   863584
C.   863903
D.   863063

Explanation:

The alphabets are coded as shown:

T W E N Y L V

8 6 3 9 5 2 0

So, In TWELVE,

T is coded as 8,

W as 6,

E as 3,

L as 2,

V as 0.

Thus, the code for TWELVE is 863203.

Deloitte Verbal Ability Test

21.   Fill in the blank: -

We all have various gifts or talents that need to be _____.

A.   grown
B.   nurtured
C.   cultured
D.   instilled

Answer: B.

22.   Synonym: -

GRATIFY

A. Thrifty
B. Satisfaction
C. Deceive
D. Pretend
Answer: B.

23. Antonym:
NADIR
A. Modernity
B. Zenith
C. Liberty
D. Progress
Answer: B.

24. One-word substitution:
Living for years and years
A. Perennial
B. Permanent
C. Annual
D. Continuous
Answer: A.

25. Analogy:
Spider: Insect: Crocodile: ?
A. Reptile
B. Mammal
C. Frog
D. Carnivore
Answer: A.

26. Direct/Indirect speech:
The little girl said to her mother, "Did the sun rise in the East?"
A. The little girl said to her mother that the sun rose in the East.
B. The little girl asked her mother if the sun rose in the East.
C. The little girl said to her mother if the sun rises in the East.
D. The little girl asked her mother if the sun is in the East.
Answer: B.

27. Active/Passive voice:
The invigilator was reading out the instructions.
A. The instructions were read by the invigilator.
B. The instructions were being read out by the invigilator.
C. The instructions had been read out by the invigilator.
D. The instructions had been read by the invigilator.
Answer: B.

28. Para jumble:

(1) arrived here on Sunday by an early morning flight.

(2) Dubai-based Win Gautam who is the

(3) accused in the Rs 50 crore Before guns' kickback case.

(4) He is scheduled to appear in the trial court by Wednesday.

A. 2134

B. 2314

C. 1432

D. 1342

Answer: B.

29. Replace the phrase printed in bold type to make the grammatically correct: -
Ramesh is as tall if not, taller than Mahesh.

A. not as tall but

B. not so tall but as

C. as tall as, if not

D. as if not

Answer: C.

30. Replace the phrase printed in bold type to make the grammatically correct: -
If I would have realized the nature of job earlier, I would not have accepted it.

A. If I have had

B. In case I would have

C. Had I been

D. Had I

Answer: A.